- 000632 CITY hereby reserves all rights, title, and interest in any and all subsurface natural gas, oil, minerals, and water on or within the premises.
 - b. CITY reserves the right to grant and use easements or to establish and use rights-of-way over, under, along, and across the leased premises for utilities, thoroughfares, or access, as it deems advisable for the public good.
 - c. CITY has the right to enter the premises for the purpose of operating or making repairs to or developing WWTP resources and services.

However, CITY shall not unreasonably or substantially interfere with LESSEE'S use of the premises and will reimburse LESSEE for physical damages, if any, to the permanent improvements located on the leased premises resulting from CITY exercising the rights reserved in this section. Such reimbursement may include a reduction in the payment proportionate to the amount of physical damage as determined by CITY. CITY will pay the costs of maintenance and repair of all CITY installations made pursuant to these reserved rights.

- d. LESSEE acknowledges the leased premises is located contiguous to land used by a CITY department. The leased premises will require shared use of access, ingress and egress.
- e. CITY shall grant to LESSEE necessary appurtenant easements for utilities to serve LESSEEs facilities on the leasehold premises. Such proposed easements shall be identified in LESSEE's design for its facilities prepared pursuant to the BSA. CITY'S approval of appurtenant easements will be conditioned on non-interference with CITY's facilities and planned operations, and will not otherwise be unreasonably withheld.

1.6 Competent Management.

Throughout the term of this lease agreement, LESSEE shall provide competent management of the leased premises to the satisfaction of the CITY. For the purposes of this paragraph, "competent management" shall mean demonstrated ability in the management and operation of a Beneficial Use of Digester Gas (BUDG) production facility and related activities in a clean, safe, maintained, and fiscally responsible manner.

1.7 Operation of Facilities.

A regular schedule of days and hours of operation shall be established by LESSEE to best perform its BSA obligations as set forth in Exhibit C to the BSA, "Scope of Work", Schedule of Days and Hours of Operation. Any changes in this schedule shall be subject to the prior written approval of the CITY or his authorized representative. LESSEE shall diligently and in a creditable manner furnish services in conformity with all applicable rules and regulations of the City of San Diego.

1.8 Political Activities.

The leased premises shall be used exclusively for the purposes specified in Section 1.2, <u>Uses</u>, hereof. The premises shall not be used for working or campaigning for the nomination or election of any individual to any public office, be it partisan or nonpartisan

SECTION 2: TERM

2.1 Commencement.

The term of this Lease shall be concurrent with the term provided in Section 13.1 of the BSA and shall be subject to the termination provisions in Section 13.2 of the BSA and other terms of the BSA. This Lease shall commence on the Effective Date of the BSA and shall encompass the Development Period under the BSA, provided however, that the term "Lease year" as used in this Lease shall be exclusive of the Development Period, and shall mean the 12-month period commencing on the first day following the Initial Operation Date of LESSEE's biogas production facilities. After the Initial Operation Date the CITY may terminate this Lease under any applicable conditions described in the BSA.

2.2 Site Development Period.

Prior to commencement of the ten (10) Lease Year operating term provided in Section 13.1 of the BSA, LESSEE, or LESSEE's designated agents, shall have the right under this Lease to enter upon the Leased Premises during the Pre-Construction Period, as defined in the BSA, to survey and assess the property for feasibility of constructing a biogas production facility as called for in BSA Exhibit C, "Scope of Work." The Pre-Construction Period under this Lease shall terminate four (4) months from the Effective Date of the BSA. Upon expiration of the Pre-Construction Period LESSEE is granted in this Lease a Construction Period not to exceed twelve (12) months to construct and otherwise develop its facilities. Consistent with Section 13 of the BSA, the ten (10) Lease Year term shall commence on the first day after the end of the Construction Period, which shall be the sooner of the Initial Operation Date or fifteen (15) months from the Effective date of the BSA.

2.3 Lease Contingencies.

This Lease is contingent upon the contractual terms and conditions of the BSA. Any condition requiring or allowing the termination of the BSA by either party shall also be grounds for the termination of this Lease by either party.

2.4 Holdover.

Any holding over by LESSEE after expiration or termination shall not be considered as a renewal or extension of this Lease. The occupancy of the premises after the expiration or termination of this agreement constitutes a month-to-month tenancy, and all other terms and conditions of this agreement shall continue in full force and effect; provided,

1000634 however, CITY shall have the right to apply a reasonable adjustment in payment to bring the payment to fair market value and to terminate the holdover tenancy at will.

Quitclaim and Surrender of LESSEE'S Interest.

On termination of this Lease, LESSEE shall deliver to CITY a quitclaim deed in recordable form quitclaiming all its rights in and to the premises. CITY may record such deed only on the expiration or earlier termination of this Lease. In the event that CITY requires any subsequent quitclaim deed, LESSEE or its successor in interest shall deliver the same within five (5) days after receiving written demand.

At the expiration or earlier termination of this Lease, LESSEE shall surrender the premises to CITY free and clear of all liens and encumbrances, except those liens and encumbrances, which existed on the date of execution hereof, and in a decent, safe, and sanitary condition. In the case of termination of this Lease by CITY prior to the end of the specified lease term, any liens and encumbrances must be approved in writing by the CITY.

Option to Extend. 2.6

Any extension of the Term of this Lease, if any, shall be made solely according to the terms and conditions of the BSA, and on no other basis.

. 2.7 Surrender of Premises.

At termination of this Lease for any reason, LESSEE shall execute, acknowledge, and deliver to CITY, within five (5) days after written CITY demand, a valid and recordable quitclaim deed covering all of the premises. The premises shall be delivered free and clear of all liens and encumbrances and in a decent, safe, and sanitary condition.

If LESSEE fails or refuses to deliver the required deed, CITY may prepare and record a notice reciting LESSEE'S failure to execute this lease provision, and the notice will be conclusive evidence of the termination of this Lease and all LESSEE'S rights to the premises.

SECTION 3: PAYMENTS

Time and Place of Payment. 3.1

Increased revenues to CITY from the sale of Excess Biogas shall be deemed to be consideration paid by LESSEE in lieu of rents for purposes of this Lease. Payments for Excess Biogas shall be as per the BSA.

The place and time of payment may be changed at any time by CITY upon thirty (30) days written notice to LESSEE. Mailed payments shall be deemed paid upon the date such payment is postmarked by the postal authorities. If postmarks are illegible, the payment shall be deemed paid upon actual receipt by the City Treasurer. LESSEE

assumes all risk of loss and responsibility for late payment charges if payments are made by mail.

3.2 Payment and Security Deposit.

- a. Security Deposit Periods. Prior to the expiration of the Pre-Construction Period of the BSA, LESSEE shall pay to CITY \$250,000.00 or provide an irrevocable letter of credit in same sum ("Security Deposit") in advance of the Construction Period to secure performance of LESSEE's project development obligations as provided in the BSA. Upon expiration of the Development Period and upon the Initial Operation Date, as defined in the BSA, LESSEE's Security Deposit for project development shall convert to security for performance of LESSEE's gas purchase obligations as provided in the BSA.
- b. Payments All payments for Excess Biogas under this Lease shall be as provided under the terms of the BSA.
- c. During the Development Period of the BSA, LESSEE shall obtain all necessary permits, approvals, and licenses for the proposed project at no cost to the CITY.LESSEE shall notify CITY in writing upon receipt of all permits, licenses, and approvals and upon completion of the LESSEE Improvements.

d. <u>Utility Service Fees</u>.

Beginning on the first day after the first quarter of the Lease Year following the Initial Operation Date, LESSEE shall for water supply services pay to CITY initially \$2.003 per Hundred Cubic Feet, for water provided to the LESSEE by the CITY. LESSEE shall provide at its expense a CITY approved meter to monitor water consumption. The consumption data shall be provided quarterly thereafter with the digester gas purchase statement. The water rate shall be reviewed quarterly and adjusted to match the water and sewer rate(s) paid by the CITY. Payments shall be submitted along with the digester gas purchase payment described in 3.1.

Beginning on the first day after the first quarter of the Lease Year following the Initial Operation Date and continuing quarterly thereafter to the last day of the Lease term, LESSEE shall pay to CITY \$16,500 per quarter for Electrical Power provided to the LESSEE by the CITY from its Gas Utilization Facility (GUF). LESSEE shall provide a CITY approved meter to monitor electric power consumption. The consumption data shall be provided quarterly with the digester gas purchase statement. The electrical consumption rate shall be reviewed quarterly and adjustments in quantity made annually to match actual consumption. The price paid for consumption from the GUF shall be \$0.0756 per kwh rate thru December 31, 2012 as specified in the Agreement. The volume of electric energy actually consumed by LESSEE shall be reconciled with its \$16,500 payments on a quarterly basis, and adjusted accordingly according to price, as provided in this section. Maximum allowable consumption is \$60,000

kWh annually and 250,000 kWh in any quarter. In the event that electric energy is temporarily unavailable to LESSEE from the GUF, the charges to LESSEE for electricity shall be equal to the rate paid by the CITY to the utility (SDG&E) for the same energy. CITY shall use its best efforts to make 860,000 kWH available to LESSEE annually from the GUF or Hydro. Any cost associated with electrical supply for LESSEE's production facility that are purchased by CITY from SDG&E shall be charged at the rate paid to SDG&E for the energy and services. Payments shall be submitted along with the digester gas purchase payment described in 3.1. In the event that LESSEE's electric charges exceed \$16,500 for any quarter, LESSEE shall pay the difference to the CITY within 45 days of written notice of the adjustment. If charges to LESSEE are less than \$16,500 for the quarter, CITY shall apply the difference as credit toward LESSEE's payment in the succeeding quarter

e. LESSEE shall not intentionally exceed the annual or quarterly maximum electrical consumption limits to increase its off site revenues by reducing its production of onsite power generation. The CITY has the right to request written substantiation for any usage above the maximums. If the excesses are proven to the CITY Management's satisfaction to be intentional or used to generate revenue, the CITY has the right to request reimbursement of any additional cost to CITY and any additional revenues received by the LESSEE. Cost adjustments will be made during the annual reconciliation.

3.3 Delinquent Payment.

If LESSEE fails to pay the Payment prior to the end of the quarter when it is due, unless a delay has been submitted in writing and mutually agreed to, LESSEE will pay, in addition to the unpaid payment, annualized rate of Twenty percent (20%) of the delinquent payment which is hereby mutually agreed by the parties to be appropriate to compensate CITY for loss resulting from payment delinquency, including lost interest, opportunities, legal costs, and the cost of servicing the delinquent account. Notwithstanding the foregoing, in no event shall the charge for late payments of payment be less than Twenty-five Dollars (\$25).

In the event that the CITY audit, if applicable, discloses that the payment for the audited period has been underpaid in excess of five percent (5%) of the total required payment, then LESSEE shall pay CITY the cost of the audit plus annualized interest rate of twenty percent (20%) per year on the amount by which said payment was underpaid, in addition to the unpaid payments as shown to be due CITY as compensation to CITY for administrative costs and loss of interest as previously described herein. LESSEE agrees to pay such amount and further agrees that the specific late charges represent a fair and reasonable estimate of the costs that CITY will incur from LESSEE'S late payment. Acceptance of late charges and any portion of the late payment by CITY shall in no event constitute a waiver of LESSEE default with respect to late payment, nor prevent CITY from exercising any of the other rights and remedies granted in this Lease.

3.4 <u>Inspection of Records</u>.

LESSEE agrees to make any and all records and accounts available to CITY for inspection at all reasonable times so that CITY can determine LESSEE'S compliance with this Lease. These records and accounts may be maintained at LESSEE's offices but shall be made immediately available to CITY in San Diego. Records shall be complete and accurate showing all income and receipts from use of the premises. LESSEE'S failure to keep and maintain such records and make them available for inspection by CITY is a breach of this Lease and cause for termination. LESSEE shall maintain all such records and accounts for a minimum period of five (5) years.

LESSEE shall, at all times during the lease term, keep accurate and complete records in double entry bookkeeping form of all financial transactions made possible by business operation on the premises. The records must be supported by source documents of original entry, purchase invoices, or other pertinent documents.

CITY shall have the discretion to require the installation of any additional methods or control it may consider necessary.

The cost of the audit(s) will be borne by CITY unless the audit(s) reveal an underpayment discrepancy of more than five percent (5%) between the payment due, as reported by LESSEE in accordance with this Lease and the BSA, and payment due as determined by CITY audit(s). In the event of such discrepancy, the cost of the audit(s) will be borne by LESSEE. Any payment due plus any costs incurred by CITY as defined under Section.

3.5 <u>Delinquent Payment</u>, hereof, shall be paid immediately.

LESSEE'S failure to keep complete and accurate records by means of double entry bookkeeping and make them available for inspection by CITY is a breach of this Lease and cause for termination.

SECTION 4: ASSIGNMENT

4.1 Time is of Essence: Provisions Binding on Successors.

Time is of the essence of all of the terms, covenants, and conditions of this Lease, and, except as otherwise provided herein, all of the terms, covenants, and conditions of this Lease shall apply to, benefit, and bind the successors and assigns of the respective parties, jointly and individually.

4.2 Assignment and Subletting.

LESSEE shall not assign this Lease except to the extent the BSA itself may be assigned, as provided in BSA.

"Assignment" for the purposes of this clause shall include any transfer of any ownership interest in this Lease by LESSEE or by any partners, principals, or stockholders, as the

000638 case may be, from the original LESSEE, its general partners, or principals.

Except as provided in the BSA, approval of any assignment or sublease shall be conditioned upon the assignee or sub-lessee agreeing in writing that it will assume the rights and obligations thereby assigned or subleased and that it will keep and perform all covenants, conditions, and provisions of this agreement which are applicable to the rights acquired. The CITY shall require, as a condition to approval of any sublease of the majority portion of the leasehold or any assignment, that the LESSEE pay additional consideration to CITY, as set forth in Section 7.15, Additional Consideration to CITY, hereof, commencing on the effective date of such proposed sublease of the majority portion of the leasehold or assignment, and may further require that this Lease or the requested sublease otherwise be revised to comply with standard CITY lease requirements that are then current. Pursuant to City Charter Section 225, the CITY must review and approve every person or entity, which will have an interest in this Lease as a sub-lessee or assignee. The CITY's approval will not be unreasonably withheld, provided all such persons and entities are of good character and reputation in the community.

4.3 Encumbrance.

Subject to prior consent by CITY, which shall not be unreasonably withheld, LESSEE may encumber this Lease, its leasehold estate, and its improvements thereon by deed of trust, mortgage, chattel mortgage, or other security instrument to assure the payment of a promissory note or notes of LESSEE, upon the express condition that the proceeds of such loan or loans be devoted exclusively to the purpose of developing the leased premises in accordance with Section 6.13, LESSEE Improvements, hereof. However, a reasonable portion of the loan proceeds may be disbursed for payment of incidental costs of construction, including but not limited to the following: off-site improvements for service of the premises; on-site improvements; escrow charges; premiums for hazard insurance or other insurance or bonds required by CITY; title insurance premiums; reasonable loan costs such as discounts, interest, and commissions; and architectural, engineering, and attorneys' fees and other normal expenses incidental to such construction.

Any subsequent encumbrances on the premises or on any permanent improvements thereon must first have the approval in writing of the CITY. Such subsequent encumbrances shall also be for the exclusive purpose of development of the premises. Provided, however, after the premises are fully developed in accordance with said Development Plan to the satisfaction of the CITY, proceeds from refinancing or from such subsequent encumbrances may be used to reduce LESSEE'S equity so long as LESSEE pays additional consideration to CITY as set forth in Section 7.15, Additional Consideration to CITY, hereof, and further that LESSEE understands and specifically agrees that the CITY shall have the sole and absolute discretion to approve, disapprove, or condition any such proposed subsequent encumbrance, including but not limited to amending the Lease to provide then-current payments and provisions.

In the event any such approved deed of trust or mortgage or other security-type

instrument should at any time be in default and be foreclosed or transferred in lieu of foreclosure, CITY will accept the approved mortgagee or beneficiary thereof as its new LESSEE under this Lease with all the rights, privileges, and duties granted and imposed in this Lease.

Upon prior written approval by CITY, said mortgagee or beneficiary may assign this Lease to its nominee, if nominee is a reputable, qualified, and financially responsible person or entity in the opinion of CITY. Any deed of trust, mortgage, or other security instrument shall be subject to all of the terms, covenants, and conditions of this Lease and shall not be deemed to amend or alter any of the terms, covenants, or conditions hereof. Pursuant to City Charter Section 225, the CITY must review and approve every person or entity, which will have a financial interest in this Lease. The CITY's approval will not be unreasonably withheld, provided all such persons and entities are of good character and reputation in the community.

4.4 Defaults and Remedies.

- a. Default. In the event that:
 - 1. LESSEE shall default in the performance of any covenant or condition required by this Lease to be performed by LESSEE and shall fail to cure said default within thirty (30) days following written notice thereof from CITY; or if any such default is not curable within thirty (30) days, and LESSEE shall fail to commence to cure the default(s) within said thirty-day period and diligently pursue such cure to completion; or
 - 2. LESSEE shall voluntarily file or have involuntarily filed against it any petition under any bankruptcy or insolvency act or law; or
 - 3. LESSEE shall be adjudicated a bankrupt, or
 - LESSEE shall make a general assignment for the benefit of creditors;

then CITY may, at its option, without further notice or demand upon LESSEE or upon any person claiming rights through LESSEE, immediately terminate this Lease and all rights of LESSEE and of all persons claiming rights through LESSEE to the premises or to possession thereof; and CITY may enter and take possession of the premises. Provided, however, in the event that any default described in Section 13.2.2 of the BSA, hereinabove is not curable within thirty (30) days after notice to LESSEE, CITY shall not terminate this Lease pursuant to the default if LESSEE immediately commences to cure the default and diligently pursues such cure to completion.

In the event there is a deed of trust or mortgage on the leasehold interest, CITY shall give the mortgagee or beneficiary written notice of the default(s) complained of, and the same mortgagee or beneficiary shall have thirty (30) days from such notice to cure the default(s) or, if any such default is not curable within thirty (30)

days, to commence to cure the default(s) and diligently pursue such cure to completion. The thirty-day period may be extended during such time as mortgagee or beneficiary pursues said cure with reasonable diligence.

- b. Remedies of Lender. Should the default(s) be noncurable by LESSEE, then any lender holding a beneficial interest in the leasehold, whose qualifications as an assignee have been approved by CITY, shall have the absolute right to substitute itself to the estate of LESSEE hereunder and to commence performance of this Lease. If such mortgagee or beneficiary shall give notice in writing of its election to so substitute itself within the thirty-day period after receiving written notice by CITY of the default, and the default, if curable, is cured by such mortgagee or beneficiary, then this Lease shall not terminate pursuant to the default. In that event, CITY expressly consents to the substitution and authorizes the mortgagee or beneficiary to perform under this Lease with all the rights, privileges, and obligations of LESSEE, subject to cure of the default, if possible, by mortgagee or beneficiary. LESSEE expressly agrees to assign all its interest in and to its leasehold estate to mortgagee or beneficiary in that event.
- c. <u>Abandonment by LESSEE</u>. Even though LESSEE has breached the Lease and abandoned the property, this Lease shall continue in effect for so long as CITY does not terminate this Lease, and CITY may enforce all its rights and remedies hereunder, including but not limited to the right to recover payments as they become due, plus damages.
- d. Waiver. Any CITY waiver of a default is not a waiver of any other default. Any waiver of a default must be in writing and be executed by the CITY in order to constitute a valid and binding waiver. CITY delay or failure to exercise a remedy or right is not a waiver of that or any other remedy or right under this Lease. The use of one remedy or right for any default does not waive the use of another remedy or right for the same default or for another or later default. CITY'S acceptance of any payments is not a waiver of any default preceding the payment. CITY and LESSEE specifically agree that the property constituting the premises is CITY-owned and held in trust for the benefit of the citizens of the City of San Diego and that any failure by the CITY or CITY staff to discover a default or take prompt action to require the cure of any default shall not result in an equitable estoppel, but CITY shall at all times, have the legal right to require the cure of any default when and as such defaults are discovered or when and as the City Council directs the CITY to take action or require the cure of any default after such default is brought to the attention of the City Council by the CITY or by any concerned citizen.

4.5 Eminent Domain.

If all or part of the premises are taken through condemnation proceedings or under threat of condemnation by any public authority with the power of eminent domain, the interests of CITY and LESSEE (or beneficiary or mortgagee) will be as follows:

- a. In the event the entire premises are taken, this Lease shall terminate on the date of the transfer of title or possession to the condemning authority, whichever first occurs.
- b. In the event of a partial taking, if, in the opinion of CITY, the remaining part of the premises is unsuitable for the Lease operation, this Lease shall terminate on the date of the transfer of title or possession to the condemning authority, whichever first occurs.
- c. In the event of a partial taking, if, in the opinion of CITY, the remaining part of the premises is suitable for continued Lease operation, this Lease shall terminate in regard to the portion taken on the date of the transfer of title or possession to the condemning authority, whichever first occurs, but shall continue for the portion not taken.
- d. <u>Transfer</u>. CITY has the right to transfer CITY'S interests in the premises in lieu of condemnation to any authority entitled to exercise the power of eminent domain. If a transfer occurs, LESSEE shall retain whatever interest it may have in the fair market value of any improvements placed by it on the premises in accordance with this Lease.
- e. <u>No Inverse Condemnation</u>. The exercise of any CITY right under this Lease shall not be interpreted as an exercise of the power of eminent domain and shall not impose any liability upon CITY for inverse condemnation.
- f. Recovery of costs. LESSEE shall reserve the right to recover its cost of improvements and any other project value from any condemnation proceeding.

4.6 Partnership Liability.

Each general partner of LESSEE shall jointly and severally perform and be responsible for each and every term, covenant, and condition, and each general partner is jointly and severally liable for performance under this Lease.

SECTION 5: INSURANCE RISKS/SECURITY

5.1 Insurance.

As requested by the CITY, LESSEE shall deliver to CITY all current certificate of insurance required under provisions of the BSA.

5.2 <u>Indemnification</u>.

LICENSEE shall protect, defend, indemnify, and hold CITY, its elected officials, officers, representatives, agents and employees, harmless from and against any and all claims asserted or liability established to the same extent and in the same manner as provided between the parties in the BSA.

9.3 642
Waste, Damage, or Destruction.

LESSEE agrees to give notice to CITY of any fire or other damage that may occur on the leased premises within twenty four (24) hours of such fire or damage. LESSEE agrees not to commit or suffer to be committed any waste or injury or any public or private nuisance, to keep the premises clean and clear of refuse and obstructions, and to dispose of all garbage, trash, and rubbish in a manner satisfactory to CITY. If the leased premises shall be damaged by any cause which puts the premises into a condition which is not decent, safe, healthy, and sanitary, LESSEE agrees to make or cause to be made full repair of said damage and to restore the premises to the condition which existed prior to said damage; or, at CITY'S option, LESSEE agrees to clear and remove from the leased premises all debris resulting from said damage and rebuild the premises in accordance with plans and specifications previously submitted to CITY and approved in writing in order to replace in kind and scope the operation which existed prior to such damage, using for either purpose the insurance proceeds as set forth in Section 5.1, Insurance, hereof.

LESSEE agrees that preliminary steps toward performing repairs, restoration, or replacement of the premises shall be commenced by LESSEE within seventy two (72) hours, and the required repairs, restoration, or replacement shall be completed within a reasonable time thereafter.

SECTION 6: IMPROVEMENTS/ALTERATIONS/REPAIRS

6.1 Acceptance of Premises.

LESSEE represents and warrants that it has independently inspected the premises and made all tests, investigations, and observations necessary to satisfy itself of the condition of the premises, or shall perform such inspection during the Preconstruction phase of the Development Period. LESSEE agrees it is relying solely on such independent inspection, tests, investigations, and observations in making this Lease. LESSEE further acknowledges that the premises are in the condition called for by this Lease, except as otherwise provided in the BSA.

6.2 Entry and Inspection.

CITY reserves and shall always have the right, but not the obligation, to enter said premises for the purpose of viewing and ascertaining the condition of the same, or to protect its interests in the premises, or to inspect the operations conducted thereon. In the event that such entry or inspection by CITY discloses that said premises are not in a decent, safe, healthy, and sanitary condition, CITY shall have the right, after ten (10) days written notice to LESSEE, to have any necessary maintenance work done at the expense of LESSEE, and LESSEE hereby agrees to pay promptly any and all costs incurred by CITY in having such necessary maintenance work done, in order to keep said premises in a decent, safe, healthy, and sanitary condition. Further, if at any time CITY determines that said premises are not in a decent, safe, healthy, and sanitary condition.

CITY may at its sole option, without additional notice, require LESSEE to file with CITY a faithful performance bond to assure prompt correction of any condition which is not decent, safe, healthy, and sanitary. Said bond shall be in an amount adequate in the opinion of CITY to correct the said unsatisfactory condition. LESSEE shall pay the cost of said bond. The rights reserved in this section shall not create any obligations on CITY or increase obligations elsewhere in this Lease imposed on CITY.

6.3 Maintenance.

- a. Except as hereinafter provided, LESSEE agrees to assume full responsibility and cost for the operation and maintenance of the premises throughout the term. LESSEE will perform all such repairs and replacements necessary to maintain and preserve the premises in a decent, safe, healthy, and sanitary condition satisfactory to CITY and in compliance with all applicable laws. All applicable codes and standards of CITY, state, and federal agencies shall be observed in all maintenance, repairs, and replacements on the premises.
- b. LESSEE shall not be responsible for any damage done by the CITY or its agents when the CITY temporarily occupies the Premises A site for digester cleaning, and reciprocally, the CITY shall not be liable for damages caused by LESSEE or its agents to the non exclusive Lease areas (Leased Premises B and C).

6.4 <u>Improvements/Alterations</u>.

No improvements, structures, or installations shall be constructed on, in, around, or under the premises, and may not be altered by LESSEE except as authorized in the BSA Exhibit "C", Scope of Work.

6.5 <u>Utilities</u>.

LESSEE agrees to order, obtain, and pay for all natural gas and communication utilities and service and installation charges in connection with the development and operation of the leased premises. All utilities will be installed underground. The CITY shall grant to LESSEE appurtenant easements for such utilities, provided that LESSEE's facility design is to be developed under the BSA and reasonably requires grants of such right(s) of way, and provided further that such designed utility locations are acceptable to the CITY and do not unreasonably interfere with the CITY's operations or plant uses.

6.6 <u>Liens</u>.

LESSEE shall at all times save CITY free and harmless and indemnify CITY against all claims for labor or materials in connection with operations, improvements, alterations or repairs on or to the premises and the costs of defending against such claims, including reasonable attorney's fees.

If improvements, alterations or repairs are made to the premises by LESSEE or by any party other than CITY, and a lien or notice of lien is filed, LESSEE shall within five (5) days of such filing either:

- a. Take all actions necessary to record a valid release of lien, or
- b. File with CITY a bond, cash or other security acceptable to CITY sufficient to pay in full all claims of all persons seeking relief under the lien.

6.7 Taxes.

LESSEE agrees to pay, before delinquency, all taxes, assessments, and fees assessed or levied upon LESSEE or the premises, land, and any buildings, structures, machines, equipment, appliances or other improvements or property of any nature whatsoever erected, installed, or maintained by LESSEE or levied by reason of the business or other LESSEE activities related to the leased premises, including any licenses or permits. LESSEE recognizes and agrees that this Lease may create a possessory interest subject to property taxation, and that LESSEE may be subject to the payment of taxes levied on such interest, and that LESSEE shall pay all such possessory interest taxes, provided however, that CITY shall reimburse LESSEE for any taxes on the land itself that are exclusive of the improvements thereon. In the event that CITY is to reimburse LESSEE for taxes on the land, such reimbursement shall be effected through a credit on the next ensuing payment for biogas under the BSA

6.8 Signs.

LESSEE agrees not to erect or display any banners, pennants, flags, posters, signs, decorations, marquees, awnings or similar devices or advertising without the prior written consent of CITY. If any such unauthorized item is found on the premises, LESSEE agrees to remove the item at its expense within 24 hours notice thereof by CITY or CITY may thereupon remove the item at LESSEE'S cost.

6.9 Ownership of Improvements and Personal Property.

- a. Any and all improvements, excluding LESSEE owned improvements as further defined in Exhibit "C" of the BSA, structures, and installations or additions to the premises now existing or constructed on the premises by LESSEE shall at Lease expiration or termination be deemed to be part of the premises and shall become, at CITY'S option, CITY'S property free of all liens and claims, except as otherwise provided in this Lease.
- b. CITY shall notify LESSEE thirty (30) days prior to termination or one hundred eighty (180) days prior to expiration, and LESSEE shall remove all improvements, structures and installations as required by section 2.7 of the BSA at LESSEE'S sole cost on or before Lease expiration or termination. If LESSEE fails to remove any above or below ground improvements, structures, and

installations as directed, LESSEE agrees to pay CITY the full cost of any removal.

- c. LESSEE-owned machines, appliances, equipment (other than trade fixtures), and other items of personal property shall be removed by LESSEE by the date of the expiration or termination of this Lease. Any said items, which LESSEE fails to remove, will be considered abandoned and become CITY'S property free of all claims and liens, or CITY may, at its option, remove said items at LESSEE'S expense.
- d. If any removal of such personal property by LESSEE results in damage to the remaining improvements on the premises, LESSEE agrees to repair all such damage.
- e. Notwithstanding any of the foregoing, in the event LESSEE desires to dispose of any of its personal property used in the operation of said premises upon expiration or termination of this Lease, then CITY shall have the first right to acquire or purchase said personal property.

6.10 Unavoidable Delay.

If the performance of any act required of CITY or LESSEE is directly prevented or delayed by reason of strikes, lockouts, labor disputes, unusual governmental delays, acts of God, fire, floods, epidemics, freight embargoes, or other causes beyond the reasonable control of the party required to perform an act, said party shall be excused from performing that act for the period equal to the period of the prevention or delay. Provided, however, this provision shall not apply to obligations to make payments as required pursuant to this Lease. In the event LESSEE or CITY claims the existence of such a delay, the party claiming the delay shall notify the other party in writing of such fact within ten (10) days after the beginning of any such claimed delay.

6.11 <u>Lessee Improvements</u>.

LESSEE plans to improve the leased premises as a biogas production facility in accordance with approvals by the CITY and receipt of all applicable governing Permits as described in Exhibit "C" of the BSA. The CITY or its designee shall have the authority to authorize changes to the BSA provided that the basic concept may not be modified without City Council approval and a document evidencing any approved changes shall be filed in the Office of the City Clerk. Failure by LESSEE to comply with the requirements of the BSA shall constitute a major default and subject this Lease to termination by CITY. The CITY, in its sole discretion, may approve an extension to the date specified for completion in the Agreement of up to six (6) months without further City Council approval.

6.12 Hazardous/Toxic Waste.

LESSEE will not allow release of hazardous substances in, on, under, or from the premises. For the purposes of this provision, a release shall include but not be limited to any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leeching, dumping, or otherwise disposing of hazardous substances. "Hazardous substances" shall mean those hazardous substances listed by the Environmental Protection Agency in regularly released reports and any other substances incorporated into the State's list of hazardous substances. A copy of the presently effective EPA and the State lists is on file in the Office of the City Clerk as Document 769704 and by this reference is incorporated herein.

In the event of any release of a hazardous substance caused by LESEE, LESSEE shall be responsible for all costs of remediation and removal of such substances in accordance with all applicable rules and regulations of governmental authorities.

LESSEE agrees to assume the defense of, indemnify, and hold CITY harmless from any and all claims, costs, and expenses related to environmental liabilities resulting from LESSEE'S operations on the premises, including but not limited to costs of environmental assessments, costs of remediation and removal, any necessary response costs, damages for injury to natural resources or the public, and costs of any health assessment or health effect studies.

If LESSEE knows or has reasonable cause to believe that any hazardous substance has been released on or beneath the premises, LESSEE shall give written notice to the CITY within ten (10) days of receipt of such knowledge or cause for belief. Provided, however, if LESSEE knows or has reasonable cause to believe that such substance is an imminent and substantial danger to public health and safety, LESSEE shall notify the CITY immediately upon receipt of this knowledge or belief and shall take all actions necessary to alleviate such danger. LESSEE will notify the CITY immediately of any notice of violation received or initiation of environmental actions or private suits relative to the premises. In addition, LESSEE and LESSEE'S sub-lessees shall not utilize or sell any hazardous substance on the property without the prior written consent of CITY.

At any time within the twelve (12) months before the expiration or earlier termination of this Lease, LESSEE, at CITY'S sole option, shall cause an environmental assessment of the premises to be completed by a professional environmental consultant registered with the State of California as a Professional Engineer, Certified Engineering Geologist or Registered Civil Engineer. Said environmental assessment shall be obtained at the sole cost and expense of LESSEE and shall establish what, if any, hazardous substances exist on, in or under the premises, in what quantities, and from what origins. If any additional hazardous substances exist in quantities greater than that allowed by CITY, county, state or federal laws, statutes, ordinances, or regulations, then said environmental assessment shall include a discussion of these substances with recommendations for remediation and removal necessary to effect compliance with those laws or statutes and estimates of the cost of such remediation or removal. LESSEE shall cause the remediation and/or removal of the hazardous substances caused by its operations recommended in the environmental assessment such that compliance with environmental law is achieved and

shall be solely responsible for all costs and expenses incurred for the remediation and/or removal of hazardous substances caused by its operations.

Notwithstanding anything to the contrary in this Lease, CITY and LESSEE acknowledge and agree that LESSEE's responsibilities with respect to the presence of any hazardous substance disposed of or otherwise placed on or beneath the Premises, or incorporated or migrating into or beneath the Premises, shall be limited to those arising from conditions caused by LESSEE's action or inaction during the term of this Lease, or by actions or inactions of third parties hired, contracted, or otherwise controlled by LESSEE, and in no event shall LESSEE be responsible for the action or inaction of the CITY, other lessees or third parties under control of City with respect to such conditions.

To the best of CITY's knowledge only, City represents that the surrounding areas have not been used for the storage, manufacture or disposal of any hazardous substance, hazardous waste, pollutants or contaminants, as such terms are used and defined by federal, state or local environmental laws, rules, regulations or ordinances, and there are no proceedings pending or, to the best of CITY's knowledge, threatened, in which such storage, manufacture or disposal is alleged. CITY further represents that to the best of its knowledge there have been no spills or releases into the air, soil, groundwater or surface waters emanating from a source located on the Premises whether such source was controlled by CITY, a prior owner of the Premises or an occupant of the Premises and that there are no underground storage tanks located on the Premises which contain or have in the past contained hazardous materials including but not limited to petroleum products.

LESSEE shall have the right to investigate and confirm the representations made in this Section by City according to the to best of City's knowledge. Sections 2.9 of the BSA ("Excused Performance") shall be expressly applicable during the Pre-Construction Period of the BSA, and LESSEE shall have the right to terminate this Lease prior to the expiration of the Pre-Construction Period for any valid reason provided therein, including but not limited to the discovery of Pollutants or Hazardous Materials at or in the Leased Premises which were not generated or released by LESSEE. In the event that LESSEE's investigations during the BSA Pre-Construction Period reveal the presence of Pollutants or Hazardous Materials for which City is responsible under this section; LESSEE may, as an alternative to terminating the BSA and this Lease without liability, propose to City that City perform timely remediation of the site of the Pollutants or Hazardous Materials at City's sole expense, and City shall in good faith evaluate the proposal and determine whether it has a duty to proceed immediately with remediation and whether the estimated expense of the remediation warrants acceptance of the proposal. In the event that City determines that it has no legal duty to perform the remediation and the costs of such remediation outweigh benefits to City, City may decline LESSEE's proposal and LESSEE shall have the right to immediately terminate this Lease without liability.

CITY agrees to assume the defense of, indemnify, and hold LESSEE harmless from any and all claims, costs, and expenses related to environmental liabilities resulting from

OCC 61478's or other party's operations on the premises prior to commencement of the Lease or adjacent operations, including but not limited to costs of environmental assessments, costs of remediation and removal, any necessary response costs, damages for injury to natural resources or the public, and costs of any health assessment or health effect studies.

SECTION 7: GENERAL PROVISIONS

7.1 Notices.

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a. Any notice required or permitted to be given hereunder shall be in writing and may be served personally or by United States mail, postage prepaid, addressed to LESSEE at the leased premises or at such other address designated in writing by LESSEE; and to CITY as follows:

CITY:

Attention: Metropolitan Wastewater Department City Administration Building 202 "C" Street, M.S. 51A San Diego, CA 92101-4155

LESSEE:

Attention: The BOC Group, Inc. 575 Mountain Avenue
Murray Hill, NJ 07974

or to any mortgagee, trustee, or beneficiary, as applicable, at such appropriate address designated in writing by the respective party.

b. Any party entitled or required to receive notice under this Lease may by like notice designate a different address to which notices shall be sent.

7.2 Compliance with Law.

LESSEE shall at all times in the construction, maintenance, occupancy, and operation of the premises comply with all applicable laws, statutes, ordinances, and regulations of CITY, county, state, and federal governments at LESSEE'S sole cost and expense. In addition, LESSEE shall comply with any and all notices issued by the City Mayor or his authorized representative under the authority of any such law, statute, ordinance, or regulation.

7.3 CITY Approval.

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The approval or consent of CITY, wherever required in this Lease, shall mean the written approval or consent of the City Mayor or his representative unless otherwise specified, without need for further resolution by the City Council.

7.4 <u>CITY Approval or Notice</u>.

The approval or consent of CITY or notice to CITY, wherever required in this Lease, shall mean the written approval or consent of, or notice to, the City Mayor or his authorized representative unless otherwise specified, without need for further resolution by the City Council. "Authorized representative" shall mean the Director of the Real Estate Assets Department or any other individual designated by the CITY in written notice to LESSEE.

7.5 Nondiscrimination.

LESSEE agrees not to discriminate in any manner against any person or persons on account of race, color, religion, gender, sexual orientation, medical status, national origin, age, marital status or physical disability in LESSEE'S use of the premises, including but not limited to the providing of goods, services, facilities, privileges, advantages, and accommodations, and the obtaining and holding of employment.

7.6 Compliance with CITY'S Equal Opportunity Contracting Program.

- a. <u>Equal Opportunity Contracting</u>. LESSEE acknowledges and agrees that it is aware of, and will comply with, the CITY's Equal Opportunity Contracting program as defined in the BSA.
- b. Local Business and Employment. LESSEE acknowledges that the City of San Diego seeks to promote employment and business opportunities for local residents and firms in all CITY contracts. LESSEE will, to the extent legally possible, solicit applications for employment, and bids and proposals for subcontracts, for work associated with this Lease agreement from local residents and firms as opportunities occur. LESSEE agrees to hire qualified local residents and firms whenever feasible.
- c. <u>Failure to Comply.</u> LESSEE understands that failure to comply with the above requirements and/or submitting false information in response to these requirements may result in termination of the BSA, this Lease agreement and debarment from participating in CITY contracts for a period of not less than one (1) year.

7.7 <u>Partial Invalidity</u>.

If any term, covenant, condition, or provision of this Lease is found invalid, void or unenforceable by a court of competent jurisdiction, the remaining provisions will remain in full force and effect.

7.8 000650 Legal Fees.

In the event of any litigation regarding this Lease, the prevailing party shall be entitled to an award of reasonable legal costs, including court and attorneys' fees.

7.9 Number and Gender.

Words of any gender used in this Lease shall include any other gender, and words in the singular number shall include the plural, when the tense requires.

7.10 Captions.

The Lease Outline, section headings, and captions for various articles and paragraphs shall not be held to define, limit, augment, or describe the scope, content, or intent of any or all parts of this Lease. The numbers of the paragraphs and pages of this Lease may not be consecutive. Such lack of consecutive numbers is intentional and shall have no effect on the enforceability of this Lease.

7.11 Entire Understanding.

This Lease, the BSA and its Exhibits, including Exhibit "C" of the BSA (the Scope of Work) and the Parent Company Guarantee of the BSA, contains the entire understanding of the parties. LESSEE, by signing these documents, agrees that there is no other written or oral understanding between the parties with respect to the leased premises. Each party has relied on its own examination of the premises, advice from its own attorneys, and the warranties, representations, and covenants of the documents themselves. Each of the parties in this Lease agrees that no other party, agent, or attorney of any other party has made any promise, representation or warranty whatsoever which is not contained in this Lease.

The failure or refusal of any party to read the Lease or other documents, inspect the premises, and obtain legal or other advice relevant to this transaction constitutes a waiver of any objection, contention, or claim that might have been based on these actions. No modification, amendment, or alteration of this Lease will be valid unless it is in writing and signed by all parties.

7.12 CITY Employee Participation Policy.

It is the policy of CITY that all CITY contracts, agreements, or leases with consultants, vendors, or LESSEES shall include a condition that the contract, agreement or Lease may, at the sole option of CITY, be unilaterally and immediately terminated by the CITY if LESSEE knowingly employs an individual who, within the twelve months immediately preceding such employment, did in his/her capacity as a CITY officer or employee participate in negotiations with or otherwise have an influence on the recommendation made to the City Council in connection with the selection of the LESSEE. It is not the intent of this policy that these provisions apply to members of the City Council.

7.13 Drug-free Workplace.

LESSEE shall be required to abide by the omnibus drug legislation passed by Congress on November 18, 1988, by adopting and enforcing a policy to maintain a drug-free workplace by doing all of the following:

- a. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of controlled substances are prohibited on the leasehold and specifying the actions that will be taken against employees for violations of the prohibition.
- b. Establishing a drug-free awareness program to inform employees about all of the following:
 - 1. The dangers of drug abuse in the workplace.
 - 2. The LESSEE'S policy of maintaining a drug-free workplace.
 - 3. Any available drug counseling rehabilitation, and employees assistance programs
 - 4. The penalties that may be imposed upon employees' for drug abuse violations.
- c. LESSEE shall include in each sublease agreement language, which indicates the sublessee's agreement to abide by the provisions of a drug-free workplace.

 LESSEE and sublessees shall be individually responsible for their own drug-free workplace programs.

7.14 <u>Disabled Access Compliance</u>.

LESSEE agrees to comply with the California Government Code, Sections 11135-11139.5; the Federal Rehabilitation Act of 1973, Section 504, Title V; the Americans with Disabilities Act of 1990 (ADA); and any other applicable state and federal laws and regulations hereafter enacted protecting the rights of people with disabilities. LESSEE'S compliance shall include but not necessarily be limited to the following:

- a. LESSEE shall not discriminate against qualified persons with disabilities in any aspects of employment, including recruitment, hiring, promotions, conditions and privileges of employment, training, compensation, benefits, discipline, layoffs, and termination of employment.
- b. No qualified individual with a disability may be excluded on the basis of disability from participation in, or be denied the benefits of, services, programs or activities of LESSEE.
- c. LESSEE shall post a statement addressing the requirements of the ADA in a prominent place at the work site.

Where required by law, LESSEE shall comply with CITY'S disabled access requirements by bringing up to code and making accessible any areas of the premises, which deny access to disabled persons. All such improvements and alterations shall be at the sole cost of LESSEE.

- e. LESSEE shall include language in each sublease agreement, which indicates the sublessee's agreement to abide by the foregoing provisions. LESSEE and sublessee's shall be individually responsible for their own ADA employment programs.
- f. LESSEE understands that failure to comply with the above requirements and/or submitting false information in response to these requirements shall constitute a default under this Lease.

SECTION 8: SPECIAL PROVISIONS

8.1 Corporate Authority.

Each individual executing this Lease on behalf of LESSEE represents and warrants that he/she is duly authorized to execute and deliver this Lease on behalf of said corporation, in accordance with a duly adopted resolution of the Board of Directors of the corporation or in accordance with the bylaws of the corporation, and that this Lease is binding upon the corporation in accordance with its terms, and that LESSEE is a duly qualified corporation and all steps have been taken prior to the date hereof to qualify LESSEE to do business in the state where the premises are situated.

8.2 Planting Strips.

LESSEE shall, at its sole cost, maintain the leased premises including weed abatement and planting landscaping for erosion prevention if required and fire prevention.

8.3 Standard of Employees.

LESSEE and its employees shall at all times conduct themselves and the operations on the leased premises in a creditable, social, and temperate manner. CITY shall have the right to demand that LESSEE permanently remove intemperate personnel from the leased premises upon good cause.

8.4 Relocation Payments.

LESSEE understands and agrees that it shall not be entitled to any relocation payment whatsoever upon termination of this Lease or in transferring operations between Lease Premise B and Lease Premise C.

8.5 Relocation of Leased Site(s).

Within the terms of this Lease, CITY may direct LESSEE to relocate to another plant site location on the PLWTP site at the CITY's expense, including lost revenues or cost of

000653 natural gas. CITY shall the give LESSEE one year written notice. LESSEE will have six (6) months to begin the relocation site work and an additional six (6) months to complete the move with extensions possible for permitting and approval processes.

SECTION 9: SAN DIEGO'S FORM OF GOVERNANCE

9.1 San Diego's Strong Mavor Form of Governance.

The CITY began operating under a mayor-council form of governance on January 1, 2006 (commonly referred to as 'strong mayor') pursuant to article XV of the City of San Diego City Charter. All references to "CITY" in this Lease and any subsequent amendments to this Lease shall be deemed to refer to "Mayor". This provision shall remain in effect for the period of time that CITY operates under the mayor-council form of governance.

SECTION 10: SIGNATURES

10.1 Signature Page.

IN WITNESS WHEREOF, this Lease agreement is executed by CITY, acting by and through its MAYOR, and by LESSEE, acting by and through its lawfully authorized officers.

	THE CITY OF SAN DIEGO
Date	Ву
	Jerry Sanders, Mayor
Date July 9, 2007	BOC MERCHANT PRODUCTION INC.: a Delaware Corporation By Brancia Title
APPROVED as to form and legality this _	
•	MICHAEL AGUIRRE, CITY ATTORNEY
	Ву

Leased Premises Legal Description

A.1 Leased Premises A: Exclusive lease area provided for the BUDG Processing Facility, includes the BUDG flare location(s).

PRIMARY LEASE PREMISE 'A' "POINT LOMA WASTEWATER TREATMENT PLANT"

That portion of the Point Lorna Wastewater Treatment Plant, in the County of San Diego, State of California, as follows:

Commencing at the City of San Diego horizontal Control Station GPS 1123, having a coordinate value of North 1829403 49 East 6254631,30 based on the North American Datum of 1983 (NAD 83), as shown on Record of Survey No. 14492, filed in the office of the County Recorder of the above said San Diego County on 3/31/1994; thence South 1-1°26°27" East 1838.73 feet to of San Diego horizontal Control Station GPS 1126, having a coordinate value of North 1827601.30 East 6254996.02, as shown on above said Record of Survey No. 14492; thence South 19°52'40" East 155.44 feet to the Point of Beginning: Thence North 82"54"34" East 153.76 feet to a point which hears South 16"27"43" East 2.011.77 feet from said harizontal Control Station OFS 1123, thence South 6-22-41" East 46.41 feet to the beginning of a curve, concave northwesterly, having a radius of 64.00 feet; thence southerly along the arc of said curve 100.57 feet through a central angle of 90°02'00"; thence South 83°39'27' West 57.22 feet to the beginning of a curve, concave northeasterly, having a radius of 29.00 feet; thence westerly along the arc of said curve 44.16 feet through a central angle of \$7°15"UI"; thence North 9°06"10" West 60:49 feet to the beginning of a curve, concave easterly, having a radius of 697.00 feet; thence northerly along the arc of said curve 18.93 feet through a central angle of 1°53°137 to an intersection with a non-tangent line; to which a radial bears South 82°27'19" West; thence along said non-tangent line, North 7°12'26" West 1.50 feet to the point of beginning.

Reserving access for ingress and eggress to maintain, repair, replace any utility within the lease described above.

Above described lease parcel of land compins 15538.31 Sounce Feet, 0.3567 Acres.

Exhibit 'B' attached and by this reference made a part hereof,

Ronald J. Dodds, P.L.S. No. 5771

Senior Land Surveyor, Field Engineering

City of San Diego

My Registration Expires 6/30/2006

ADDITIONAL LEASE PREMISE 'AI' "POINT LOMA WASTEWATER TREATMENT PLANT"

That portion of the Point Lome Wastewater Treatment Plant, in the County of San Diego, State of California, as follows:

Commencing at the City of San Diego horizontal Control Station GPS 1123, having a coordinate value of North 1829403.49 East 6254631.30 based on the North American Datum of 1983 (NAD 83), as shown on Record of Survey No. 14492, filled in the office of the County Recorder of the above said San Diego County on 3/31/1994; thence South 11°26°27" East 1838.73 feet to of San Diego horizontal Control Station GPS 1126, having a coordinate value of North 1827601.30 East 6254996.02, as shown on above said Record of Survey No. 14492; thence North 69°55'28" East 233.64 feet to the Point of Beginning. Thence North 34°59'56" East 20.00 feet to a point which bears South 19°14'57" East 1,806.52 feet from said horizontal Control Station GPS 1123; thence South 55°00'04" East 10.00 feet; thence South 34°59'56" West 20.00 feet; thence North 55°00'04" West 10.00 feet to the point of beginning.

Reserving access for ingress and egress to maintain, repair, replace any utility within the base described above.

Above described lease parcel of inad contains 200.00 Square Fest, 0.0046 Acres.

Exhibit 'B' attached and by this reference made a part hereof.

Ronald J. Dodds, P.L.S. No. 5771

Senior Land Surveyor, Field Engineering

City of San Diego

My Registration Expires 6/30/2008

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ADDITIONAL LEASE PREMISE 'A2' "POINT LOMA WASTEWATER TREATMENT PLANT"

That portion of the Point Loma Wastewater Treatment Plant, in the County of San Diego, State of California, as follows:

Commencing at the City of San Diego horizontal Control Station GPS 1123, having a coordinate value of North 1829403.49 East 6254631.30 based on the North American Darum of 1983 (NAD 83), as shown on Record of Survey No. 14492, filed in the office of the County Recorder of the above said San Diego County on 3/31/1994; thence South 11°26'27' East 1838.73 feet to of San Diego horizontal Control Station GPS 1126, having a coordinate value of North 1827601.30 East 6254996.02, as shown on above said Record of Survey No. 14492; thence North 59°46'52" East 272.40 feet to the Point of Beginning; Thence North 34°20'17" East 17.00 feet to a point which bears South 29°16'05" East 1.760.03 feet from said horizontal Control Station GPS 1123; thence South 55°39'43" East 29.00 feet; thence South 34°20'17" West 17.00 feet; thence North 55°39'43" West 29.00 feet to the point of beginning.

Reserving access for ingress and egress to maintain, repair, replace any utility within the lease described above.

Above described lease parcel of land contains 493.00 Source Feet, 0.0113 Acres.

Exhibit 'B' attached and by this reference made a part hereof.

Ronald J. Dodds, P.L.S. No. 5771

Senior Land Surveyor, Field Engineering

City of San Diego

My Registration Expires 6/30/2008



A.2 Leased Premises B: Primary Non-exclusive lease area normally used for truck filling.

000657

LEASE PREMISE 'B' "POINT LOMA WASTEWATER TREATMENT PLANT"

That portion of the Point Loma Wastewater Treatment Plant, in the County of San Diego, State of California, as follows:

Commencing at the City of San Diego horizontal Control Station GPS 1123, having a coordinate value of North 1829403.49 East 6254631.30 based on the North American Datum of 1983 (NAD 83), as shown on Record of Survey No. 14492, filed in the office of the County Recorder of the above said San Diego County on 3/31/1994; thence South 11°26'27' East 1838.73 feet to of San Diego horizontal Control Station GPS 1126, having a coordinate value of North 1827601.30 East 6254996.02, as shown on above said Record of Survey No. 14492; thence South 19°52'40" East 155.44 feet to the Point of Beginning: Thence North 82°54'34" East 153.76 feet to a point which bears South 16°27'43" East 2.011.77 feet from said horizontal Control Station GPS 1123; thence North 6°20'38" West 80.00 feet; thence South 82°54'34" West 154.96 feet; thence South 7°12'26" East 80.00 feet to the point of beginning.

Reserving access for ingress and egress to maintain, repair, replace any utility within the lease described above.

Above described lease parcel of land contains 12348:62 Square Feet. 0.2835 Acres.

Exhibit 'B' attached and by this reference made a part herenf.

Ronald J. Dodds, P.L.S. No. 5771

Senior Land Surveyor, Field-Engineering

City of San Diego

My Registration Expires 6/30/2008

EXP. F-30-2000

A.3 Leased Premises C: Secondary Non-exclusive lease area used when

Leased Premises B is unavailable due to Point Loma Treatment Plant operational needs. Area to be used only for limited Truck filling.

LEASE PREMISE 'C' "POINT LOMA WASTEWATER TREATMENT PLANT"

That portion of the Point Lome Wastewater Treatment Plant, in the County of San Diego, State of California, as follows:

Commencing at the City of San Diego horizontal Control Station GPS 1123, having a coordinate value of North 1829403.49 East 6254631.30 based on the North American Datum of 1983 (NAD 83), as shown on Record of Survey No. 14492, filled in the office of the County Recorder of the above said San Diego County on 3/31/1994; thence South 11°26'27" East 1838.73 feet to of San Diego horizontal Control Station GPS 1126, having a coordinate value of North 1827601.30 East 6254996.02, as shown on above said Record of Survey No. 14492; thence South 11°34'29" East 93.25 feet to the Point of Beginning: Thence South 7°12'26" East 60.34 to the beginning of a non-tangent curve; concave easterly, having a radius of 724.00 feet, to which a radial bears South 82°27'19" West; thence southerly along the arc of said curve 19.67 feet through a central angle of 1°33'23" to a point which bears South 11°17'17" East 2.011.70 feet from said horizontal Control Station GPS 1123; thence South 82°50'12" West 30.43 feet; thence North 7°09'53" West 80.00 feet; thence North 82°50'07" East 30.00 feet to the point of beginning.

Reserving access for ingress and ogress to maintain, repair, replace any utility within the lease described above.

Above described lesse parcel of land contains 2404.97 Square Feet, 0.0552 Acres.

Exhibit 'B' attached and by this reference made a part hereof.

Ronald J. Dodds, P.L.S. No. 5771

much of Horton

Schior Land Surveyor, Field Engineering

City of San Diego

My Registration Expires 5/30/2008

ENF. B-10-2006

Parcel Map(s).

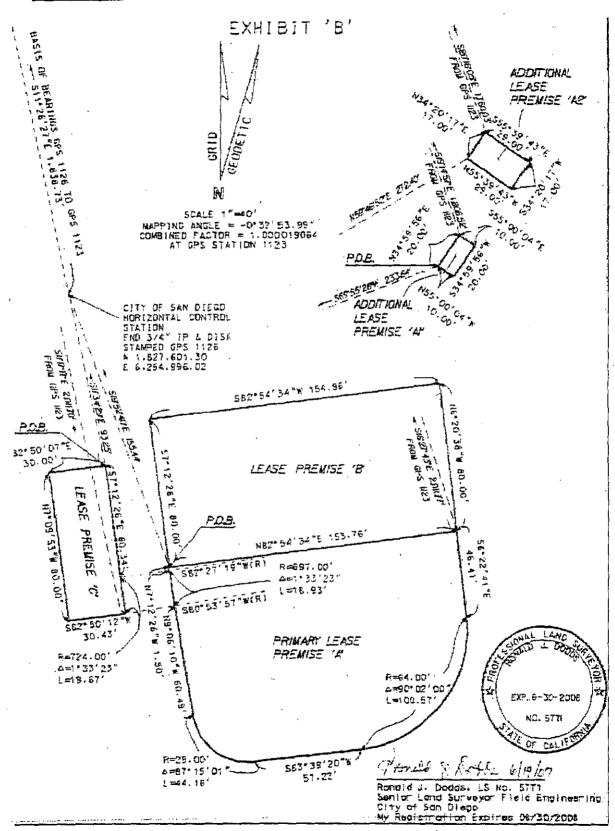


Exhibit C

000661

BOC MERCHANT PRODUCTION, INC. CORPORATE NAME

I, Robert Wowk, certify that I am the Chief Financial Officer of the corporation named in the attached agreement; that Stanlev P. Borowiec, who signed this agreement on behalf of the corporation, was then Vice President of said corporation; that said agreement was duly signed for and on behalf of said corporation by authority of its governing body, pursuant to a resolution duly adopted by its Board of Directors on March 1, 2007, and is within the scope of its corporate powers; and that set out below are the names of the officers and directors of said corporation.

By Tolluer

CORPORATE SEAL

Name Patrick F. Murphy - CEO & President
Title

Name Robert Wowk - CFO
Title

Name John J. Brull - Vice President
Title

Name <u>Stanley P. Borowiec - Vice President</u>
Title

Exhibit D

Schedule of Applicable Rates.

The following documents are used to determine the applicable rates which apply to this Lease:

SDG&E

- 1. Current Master Purchase and Sales Agreement for PLWTP Generation
 - 2. Tariff Schedule PA-T-1
 - 3. Tariff Schedule EECC
 - 4. Tariff Schedule S

Water & Wastewater Billing statement, Account number U19-00804-21-0

Exhibit E

Schedule of Days and Hours of Operation.

During the normal course of operations, the expected manning schedule and days and hours of operations are as follows:

Plant Operations: Monday through Sunday, 24 hours per day, with remote monitoring from Linde/BOC's Remote Operations Center.

Plant Staff-Operations: Monday through Friday, 7am to 4pm.

Distribution Operations: Monday through Sunday, 6am to 10pm, 6 truck movements per day during that period (in and out).

Support Operations (maintenance, deliveries, etc.): Monday through Friday, 7am to 4pm.

Staff may be on site other than the previously listed hours as required to meet emergency and operational commitments.

Truck routing and travel hours may be adjusted as needed to comply with the Community's issues.

All hours are for reference only and will be adjusted as required by the MOU.

Attachment A

Biogas Sales Agreement

AGREEMENT FOR THE PURCHASE AND SALE OF BIOGAS

BETWEEN

THE CITY OF SAN DIEGO

AND

BOC MERCHANT PRODUCTION INC.

- A WHOLLY OWNED SUBSIDIARY OF THE BOC GROUP, INC.

DATED AS OF JUNE 22, 2007

IN ORDER TO CONSERVE PAPER, THIS COPY OF THE LEASE DOES NOT HAVE THE AGREEMENT FOR THE PURCHASE AND SALE OF BIOGAS REPEATED HERE, SINCE IT IS ATTACHED IN FRONT OF THE LEASE.

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AGREEMENT FOR THE PURCHASE AND SALE OF BIOGAS

BETWEEN

THE CITY OF SAN DIEGO

AND

BOC MERCHANT PRODUCTION INC.

- A WHOLLY OWNED SUBSIDIARY OF THE BOC GROUP, INC.

DATED AS OF JUNE 22, 2007

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000670 AGREEMENT FOR THE PURCHASE AND SALE OF BIOGAS

THIS AGREEMENT FOR THE PURCHASE AND SALE OF BIOGAS (the "Agreement") is made and entered into by and between BOC MERCHANT PRODUCTION INC., a Delaware corporation and a wholly owned subsidiary of THE BOC GROUP, INC., also a Delaware corporation ("Buyer") and the CITY OF SAN DIEGO, CALIFORNIA, USA, a municipal corporation ("Seller").

WHEREAS, Seller owns and operates the Point Loma Waste Water Treatment Plant located in San Diego, California ("Seller's Plant"); and

WHEREAS, methane biogas ("Biogas") is a by-product of Seller's operations at the Seller's Plant; and

WHEREAS, methane biogas is a greenhouse gas that may be contributing to global warming such that beneficial use of methane biogas has both ecological and economic benefits; and

WHEREAS, the Seller currently uses some of the methane biogas produced at Seller's Plant for power co-generation which provides ecological and economical benefits to the Seller and larger community; and

WHEREAS, however, excess methane Biogas produced at Seller's Plant is currently being burned and is available for other beneficial uses;

WHEREAS, Buyer is engaged in the business of purifying and processing such Biogas as a renewable and alternative fuel and energy source for commercial sale to others; and

WHEREAS, Buyer is desirous of purchasing from Seller and Seller is desirous of selling the excess Biogas from Seller's Plant under the terms and conditions of this Agreement;

NOW THEREFORE, and in consideration of the promises hereinafter contained, Seller and Buyer hereby agree as follows:

1. DEFINITIONS

Unless defined elsewhere in this Agreement, the capitalized terms used in this Agreement shall have the meanings set forth in this Section. The terms defined below or used elsewhere in this Agreement shall be deemed to refer to the singular or plural as the context requires.

- 1.1 "Authorized Representative" shall have the meaning ascribed in Section 16.1.
- 1.2 "Base Price" shall mean the price that the Buyer pays to Seller for each million British Thermal Units (MMBTU or mmbtu) of Biogas used by Buyer to produce Product which shall be measured and computed as provided in Articles 4 and 5 of this Agreement.
- 1.3 "Bureau of Labor Statistics" or "BLS" shall mean the U.S. Department of Labor's Bureau of Labor Statistics.
 - 1.4 "Buyer's Plant" shall mean the building and apparatus required for the processing of the Biogas into Product, including all future additions,

changes, or alterations thereto, as Buyer may make, in its reasonable discretion, and which is to be installed, owned, maintained and operated by Buyer on Buyer's Plant Site, provided that any such additions, changes or alterations which impact Seller's Plant, Seller's Property or Seller's operations at such site shall be subject to Seller's prior written approval which will not be unreasonably withheld or denied.

- 1.5 "Buyer's Plant Design Capacity" shall mean 1.6 MMSCF of Net Biogas Delivered per day based on a methane content of 63%.
- 1.6 "Buyer's Plant Site" shall mean that certain +/- 30,985 square feet of rentable space located on Seller's Property, as shown on the site plan attached hereto as Exhibit A and made a part hereof, which is described in detail and shall be leased by Seller to Buyer pursuant to the separate written Lease and on which Buyer's Plant and other related or future facilities and improvements will be located, along with access, egress, utilities and other appurtenant rights as set forth in the Lease.
- 1.7 "Biogas" shall have the meaning assigned to such term in the second recital clause of this Agreement and mean the raw digester gas produced from the sludge digesters at Seller's Plant.
- 1.8 "Biogas Metering System" shall have the meaning ascribed in Section 4.2.
- 1.9 "Confidential Information shall have the meaning ascribed in Section 15.1
- 1.10 "Construction Period" shall mean that portion of the Development period following the Pre-Construction Period."
- 1.11 "Contract Year" shall mean a twelve (12) month period beginning at 12:00:01 A.M. on the earlier of: a) Initial Operation Date or b) fifteen months after the Effective Date, or any subsequent anniversary thereof.
- 1.12 "Deliver," "Delivery" or "Delivered" shall mean, with respect to Biogas, the point and time at which the Biogas stream is diverted from Seller's Plant and enters the Buyer's Delivery Point.
- 1.13 "Delivery Point" shall mean the point of connection and its adjacent Buyer's Plant isolation valve the Buyer installs on the Seller's low pressure digester gas header, as described in Exhibit C (the Scope of Work).
- 1.14 "Development Period" shall mean the period from execution of this Agreement until the Initial Operation Date and include the Pre-Construction Period and the Construction Period.
- 1.15 "Disclosing Party" shall have the meaning ascribed in Section 15.1.
- 1.16 "Disruption in Biogas Supply" shall mean any event which causes the availability of excess Biogas to increase or decrease significantly for any period over 4 hours.
- 1.17 "Effective Date" shall mean the date upon which this Agreement has been fully executed by both Parties.

- 1.18 "Excess Biogas" shall mean the excess raw Biogas produced from the sludge digesters at Seller's Plant that is not needed by Seller for the Existing Biogas Uses that can occur in the Seller's installed equipment as of the Execution Date.
- 1.19 "Existing Biogas Uses" shall have the meaning ascribed in Section 3.1
- 1.20 "Force Majeure" shall have the meaning ascribed in Section 11.1.
- 1.21 "Index" U.S. Department of Labor's Bureau of Labor Statistic's Consumer Price Index for the San Diego Metro Service Area (See Appendix F for the use of the Index and additional definitions as they apply to the use of the Index)
- 1.22 "Initial Operation Date" shall mean the first day following establishment of the initial Maximum Operating Capacity pursuant to the performance and operational testing upon substantial completion of Buyer's Plant as more fully described in Exhibit C (the Scope of Work, Section 15); prior to which, the Buyer may only conduct operations and delivery of product which are reasonably required for start-up, commissioning and the aforementioned performance and operational testing, or as approved by Seller.
- 1.23 "Lease" shall mean the Lease Agreement between Seller and Buyer concerning Buyer's occupancy and use of Buyer's Plant Site.
- 1.24 "Maximum Operating Capacity" shall mean the operating capacity of Buyer's plant measured in MMSCF per day of Excess Biogas Delivered as established initially and from time to time thereafter pursuant to the performance and operational testing described in Exhibit C (Scope of Work, Section 15).
- 1.25 "Million standard cubic feet" or "MMSCF" or "mmscf' shall mean millions of standard cubic feet of gas under standard conditions (Dry, 0% moisture/relative humidity, 60°F, 14.73 psia) determined pursuant to the standards of the American Gas Association.
- 1.26 "MMBTU Testing" shall have the meaning ascribed in Section 4.3.
- 1.27 "Net Biogas Delivered" shall mean Excess Biogas Delivered less any Biogas diverted before or after the Delivery Point to maintain proper function of Buyer's flare as described in Section 4.2.
- 1.28 "Notice of Completion" or "NOC" shall mean the date the Buyer has met the performance and testing requirements as described in Exhibit C (the Scope of Work, Section 15) necessary to begin full commercial operations at the initial Maximum Operating Capacity and the Seller's issuance of a written Notice of Completion in that regard, which will not be unreasonably withheld or delayed.
- 1.29 "Pre-Construction Period" shall mean the 120 day period commencing upon the next business day after full execution of this Agreement by both Parties.
- 1.30 "Product" shall mean the purified and processed biogas manufactured by Buyer at Buyer's Plant, from Biogas, of a quality that is suitable to the Buyer.

- 1.31 "Receiving Party" shall have the meaning ascribed in Section 15.1.
- 1.32 "Records" shall have the meaning ascribed in Section 6.1.
- 1.33 "Scope of Work" or "SOW" shall mean the Scope of Work set forth in Exhibit C to this Agreement.
- 1.34 "Seller's Plant" shall have the meaning ascribed in the recitals and mean the Seller's Point Loma Waste Water Treatment Plant facility located on Seller's Property.
- 1.35 "Seller's Property" shall mean the parcel of land owned and/or leased by Seller located in San Diego, California USA upon which Seller's Plant and other related facilities and improvements are located.

2. CONSTRUCTION OF BUYER'S PLANT

2.1 Construction of Buyer's Plant. Buyer will commence construction of Buyer's Plant with reasonable promptness and diligence and according to the timeframes set forth in the project schedule attached hereto as Exhibit D and made a part hereof, except as such timeframes may be extended up to a maximum of twelve (12) months by causes beyond Buyer's reasonable control. If such extensions exceed twelve (12) months, Seller may terminate this Agreement pursuant to the Force Majeure provisions in Section 11.3. Buyer shall construct, install and maintain Buyer's Plant at its own expense. Buyer agrees that Buyer's Plant shall not affect or impair the operations of Seller's Plant except as expressly contemplated by this Agreement. Seller shall cooperate with Buyer in connection with the scheduling of the construction and installation of Buyer's Plant. Seller will provide Buyer with a copy of Seller's safety regulations prior to commencing construction and operations at Buyer's Plant Site, and Buyer shall comply with all of such safety regulations.

- Ownership of Buyer's Plant. Buyer's Plant will at all times, during and after the termination or expiration of this Agreement, be and remain, the sole and exclusive property of the Buyer. Seller shall take no action inconsistent with Buyer's ownership. Buyer's Plant includes proprietary information and Seller shall not permit third parties to inspect Buyer's Plant or information concerning its operation without Buyer's prior written consent.
- 2.3 Security Deposit and Damages for Failure to Construct & Operate Plant.
 - 2.3.1 Prior to expiration of the Preconstruction Period, Buyer has the right to terminate this Agreement without liability if Buyer determines at Buyer's sole discretion that the conditions in Section 2.9 (Excused Performance) cannot be reasonably satisfied in a timely and economic manner to allow Buyer to fulfill its obligations under this Agreement and notifies the Seller of same in writing. If Buyer does not terminate this Agreement under the conditions of Section 2.9 prior to expiration of the Pre-Construction Period, then Buyer shall provide Seller with an irrevocable letter of credit in the amount of Two Hundred and Fifty Thousand Dollars (\$250,000) which shall be referred to hereinafter as Buyer's Security Deposit. Any letter of credit furnished to fulfill the requirements of this Section shall be irrevocable for the periods provided in subsections 2.3.2.
 - 2.3.2 If, after expiration of the Pre-Construction Period, Buyer abandons the Buyer's Plant Site prior to Initial Operation without completing Buyer's Plant as required by this Agreement, except as may be excused herein, or terminates this Agreement without cause prior to the Notice Of Completion, Seller shall be entitled to the Security Deposit amount as stipulated damages provided however, that Buyer shall in addition still retain the responsibility of removing any facilities it has placed on the Leased site pursuant to Section 2.7, and if Buyer fails to perform those removal obligations, the Seller shall in addition to the Security Deposit be entitled to the reasonable cost of removal of Buyer's Plant, or any and all portions thereof. These terms shall represent Seller's exclusive remedy and Buyer's sole liability for such failure to complete its plant, or termination without cause as provided herein.
 - 2.3.3 Upon completion of Buyer's plant and within forty-five (45) days after the Initial Operation Date, the Security Deposit shall be converted from an irrevocable letter of credit to a cash deposit to secure initial performance of operations and purchasing by Buyer, and this deposit shall be termed the Pre-Payment Amount., Buyer shall tender to Seller the Pre-Payment amount in exchange for the foregoing letter of credit, and the Pre-Payment Amount shall be applied to amounts payable by Buyer to Seller under Section 5 of this Agreement and the Lease as and when they become due. When the Pre-Payment Amount has been exhausted through Buyer's purchasing of Excess Biogas, the Security Deposit shall be deemed discharged.

- 2.3.4 If, after the Initial Operation Date, Buyer wrongfully terminates this Agreement without cause or without applicable excuse provided in this agreement fails to purchase Excess Biogas as provided in this agreement, Seller's exclusive remedy, and Buyer's sole liability, shall be Buyer's forfeiture, and Seller's assumption of title to, the then current balance of the Pre-Payment amount, if any, plus, additional amounts to the extent the then current balance is not sufficient for the amounts owed at the time of termination for Net Biogas Delivered and the reasonable cost of removal of Buyer's Plant if Buyer fails to do so as required in Section 2.7 of this Agreement.
- 2.4 Payment Bond. Buyer shall provide a payment bond from a surety authorized in the State of California to secure payment for all material, labor and services in the construction of Buyer's Plant to the extent required by and complying with California Civil Code § 3247 (2007). Such bond shall have a penal sum of \$2 million and shall be released when Buyer has provided evidence (in the form of lien waivers, releases and certifications) that all persons providing material, labor and services for the construction Buyer's Plant have been paid in full.
- Access to and Use of Seller's Property. Buyer shall have the right to occupy and use, in connection with the performance of this Agreement, those parts of Seller's Property as set forth in the Lease and this Agreement. Buyer's rights of occupancy and use shall be limited to those purposes and activities provided for in the Lease and this Agreement. Seller shall provide access to Buyer's Plant Site via common roadways and entryways for Buyer's employees, its customers and its agents as well as for trucks involved in construction of Buyer's Plant and shipping of Product reasonably sufficient to permit Buyer to fulfill its obligations under this Agreement. Buyer shall have the right to access those parts of the Seller's Plant as reasonably needed to permit Buyer to construct and operate Buyer's Plant. Except as otherwise set forth in the Lease or herein, Buyer shall not have access to any area on Seller's Property without Seller's permission, not to be unreasonably denied.
- 2.6 Existing Conditions. Seller is solely responsible for and shall hold Buyer harmless from any existing pollution conditions, ground contaminations or other environmental conditions existing at the Buyer's Plant Site or not resulting from the operations of the Buyer, provided, however, that Seller makes no representation to the Buyer relative to the suitability of the Leased Site for the purposes of the Buyer's concept, the construction of the Buyer's Plant and its operations. Buyer shall hold Seller harmless from any environmental conditions resulting from Buyer's operations.
- 2.7 Removal of Buyer's Plant. Buyer shall have one hundred eighty (180) days after termination, expiration or cancellation of this Agreement to complete removal of Buyer's Plant from the Buyer's Plant Site. Buyer shall have no obligation, however, to remove any pilings, foundations or other such in-ground installations (except to the extent agreed in writing as a condition of Seller's approval of the design and construction of Buyer's Plant pursuant to the design approval process set forth in the Scope of Work). In the event that Buyer's Plant has not been fully removed by Buyer within the aforesaid time period, Seller may remove Buyer's Plant, and invoice Buyer for the reasonable costs for

- the removal. In the event Buyer has not removed Buyer's Plant from the Plant Site after two-hundred forty (240) days, Seller may take possession of the Buyer's Plant and all associated equipment located at the Plant Site.
- 2.8 <u>Utilities and Equipment</u>. Except for the equipment and the utilities described in Exhibit C, attached hereto and made a part hereof, which shall be provided by Seller or as otherwise set forth in the Lease, Buyer shall provide itself, and be solely responsible for (i) such facilities, equipment, employees and personnel, and (ii) permits, licenses and other forms of clearance from governmental or regulatory agencies, as are necessary for the conduct of Buyer's business operations in accordance with this Agreement.
- 2.9 <u>Excused Performance</u>. Buyer shall not be obligated to commence or complete the construction of, or continue operation of, Buyer's Plant and may terminate this Agreement without prejudice or further liability to Seller, other than those contemplated in Section 2.3 herein if, or to the extent that:
 - 2.9.1 Seller fails to provide the Buyer's Plant Site or access as required to operate Buyer's Plant.
 - 2.9.2 Despite diligent, good faith and reasonable efforts, Buyer cannot obtain permits required for the construction and operation of Buyer's Plant or the conditions imposed upon such permits make the construction or operation of Buyer's Plant technically or economically unfeasible.
 - 2.9.3 Material and unforeseen site conditions are discovered that make construction or operation of Buyer's Plant technically or economically unfeasible.
 - 2.9.4 Despite diligent, good faith and reasonable efforts, Buyer does not execute the necessary agreements with offsite retail energy fuel cell or gas customers or receive the required SGIP grant reservations.
- 2.10 <u>Microstation Format</u>. Buyer agrees to provide Seller the following drawings in Microstation drawing format:
 - 2.10.1 Underground utilities and foundations for Buyer's Plant; and
 - 2.10.2 Interconnections between Buyer provided components of Buyer's Plant and Seller's Plant.
- 2.11 Permits and Regulatory Compliance. The Buyer will be solely responsible for all and any permits including operational permits and any and all regulatory compliance including, but not limited to, building permits, environmental permits, coastal permits, California Accidental Release Prevention Program (CAL-ARP) compliance, 19 CCR Division 2 sections 2736 through 2785 CAL-OSHA compliance, 8 CCR for fuel gases as well as Division 4 section 5189, Process Safety Management of Acutely Hazardous Materials, 40 CFR Part 68 (Federal ARP) and 24 CFR section 1910, 119 Federal OSHA PSM for Buyer's Plant and any existing systems that may be effected by installation of Buyer's Plant, with the exception of those activities to be carried out by the Seller as listed in Exhibit C, Scope of Work.

2.12 <u>Seller's Facilities.</u> The Seller shall have the right to approve any required or requested modification to the Seller's existing Plant or future facilities or systems. Such approval shall not be unreasonably withheld if the total projected revenues or the biogas sales price payable to Seller does not decrease. If, as a result of said required of requested modifications to the Seller's Plant, facilities or system, causes a decrease in either total revenues or base price by more than 20%, then the Seller will have the right to cancel the Agreement.

3. BIOGAS SUPPLY

- Available Biogas Supplied Exclusively to Buyer. Seller will Deliver to or have available for Delivery to Buyer all available Biogas, up to the Buyer's Plant Design Capacity, that is in excess of that currently used or required to be used in Seller's existing biogas utilitizing equipment installed as of the Effective Date ("Existing Biogas Uses"). Because of the variability in the Biogas generated by the Seller at Seller's Plant for reasons beyond its control, Seller cannot guarantee the delivery of specific amounts of Biogas. However, Seller agrees that Buyer shall have the right to all Biogas produced at the Seller's Plant in excess of Existing Biogas Uses and shall use its best efforts to supply as much Excess Biogas as possible up to the Buyer's Plant Design Capacity.
- Notice of Disruption of Biogas Supply. Seller shall keep Buyer informed of all planned Disruptions of Biogas Supply due to planned maintenance, planned downtime or any other events that are known in advance. In the case of unforeseen and unplanned Disruptions in Biogas Supply, Seller shall notify Buyer as soon as practically possible as to the nature of the disruption and the expected duration of the disruption.
- Biogas Composition. Seller shall use best efforts to maintain the methane content of the Biogas at approximately 63% and the level of hydrogen sulfide at less than 60 parts per million by volume. Seller shall not be liable to the Buyer if these qualitative Biogas characteristic levels cannot be maintained at all times, and Seller makes no representation or warranty that these levels will be maintained in the Excess Biogas. Seller shall be obligated to use its best efforts only. Seller is permitted to increase the level of hydrogen sulfide as its permits limits are increased, but Buyer shall be entitled to a credit against amounts otherwise payable to Seller for the actual and reasonable increased costs associated with limits in excess of 60 parts per million by volume.

4. METERING & TESTING OF BIOGAS

- 4.1 <u>Accuracy</u>. All meters, quality and quantity measurements used or performed by either party pursuant to this Agreement shall be in accordance with the standards and guidelines of the American Gas Association and Instrument Society of America.
- 4.2 Meter Measurement. Buyer will install and maintain a volumetric meter system that will separately measure the gross Biogas Delivered to Buyer's Plant and the gross Biogas that is required by the Buyer to functionally keep the Buyer's flare functioning to meet permit requirements or to meet the operational requirements of the Buyer's Plant. A net metering arrangement may only be used to establish Net Biogas Delivered for billing purposes, and such arrangements and systems shall be approved by Seller, which approval shall not be unreasonably withheld. Measurements shall be made in MMSCF as described in Exhibit E attached hereto and made a part hereof ("Biogas Metering System"). The Biogas Metering System will be used to determine the total volume of Net Biogas Delivered in MMSCF. These measurements shall be made available to Seller and/or witnessed by Seller at Seller's sole discretion. The meter(s) will be calibrated by Buyer at Buyer's expense initially and then at least once each Contract Year beginning with the second Contract Year. Seller will be notified of and have the right to witness the calibration. Seller may request recalibration of the meter(s) within the same year upon good cause as provided for in Exhibit E.
- 4.3 Testing and Conversion to MMBTU. Buyer shall sample and test (using an independent laboratory) the Biogas at the metering point to determine the MMBTU content of the Biogas ("MMBTU Testing") as described in Exhibit E. Seller will be notified of and have the right to witness the sampling and tests. The test results shall be made available to Seller. The MMBTU Testing results shall establish the MMBTU content per volume (MMSCF) of Biogas which forms the basis of the unit Base Price Buyer must pay Seller for Biogas. Such testing shall be performed quarterly. Payment and billing will be based on a rolling average of the results from the previous four quarters (or available results in the case of the first three quarters). Seller can request additional testing provided Seller bears the cost.

5. PRICE AND PAYMENT TERMS

- 5.1 <u>Price</u>. Buyer shall pay Seller the unit Base Price for each MMBTU unit of Net Biogas Delivered to Buyer.
 - 5.1.1 The Base Price for the first five contract years shall be One dollar and ten cents (\$1.10) per MMBTU.
 - 5.1.2 In addition, Buyer shall pay Seller a premium of twenty-five cents (\$0.25) per MMBTU for that portion of and to the extent the Net Biogas Delivered in a given Contract Year exceeds an annual average of 1.1 MMSCF per day for 365 days. Any such premium payment shall be computed and paid within forty-five (45) days after the reconciliation meeting which shall occur within sixty (60) days after the end of the Contract Year.
 - 5.1.3 Beginning in July 1 of Contract Year six(6) and annually thereafter, the Base Price and premium shall be adjusted as described in Appendix F. This adjustment will only apply when adjustment leads to a price higher than the previous year. If the adjustment leads to a lower price than the previous year, no adjustment will be made and the previous price will be carried forward.
- 5.2 Payment. On or before fifteen (15) days after the end of each calendar quarter following the Initial Operation Date, Buyer shall submit an accounting of its measurements of the Net Biogas Delivered, MMBTU computation, Base Price, credits and the proposed corresponding net payment therefore to Buyer for the amount due under this Article 5 for such quarter. Buyer shall remit payment of the agreed amount to Seller within forty-five (45) days after receipt of an email approval of Seller's concurrence. Unless the Seller requests otherwise, payments shall be made by check made payable to the City Treasurer and mailed to the Office of the City Treasurer, City of San Diego, P.O. Box 122289, San Diego, California 92112-4165, or delivered to the Office of the City Treasurer, Civic Center Plaza, 1200 Third Avenue, First Floor, San Diego, California. The place and time of payment may be changed at any time by Seller upon thirty (30) days written notice to Buyer. Mailed payments shall be deemed paid upon the date such payment is postmarked by the postal authorities. If postmarks are illegible, the payment shall be deemed paid upon actual receipt by the City Treasurer. Buyer assumes all risk of loss and responsibility for late payment charges if payments are made by mail.
- 5.3 Emission Credits. During the term of this Agreement, any emissions credits associated with the Excess Biogas Delivered to and used by Buyer at the Buyer's Plant Site shall be:
 i) divided evenly up to \$1 million accumulative over the duration of this Agreement; and
 ii) divided 3/4 to the Seller and 1/4 to the Buyer for any amounts over \$1 million accumulative over the duration of this Agreement. This does not include, and Buyer shall be entitled to, emission credits associated with Product that is shipped from and used off Buyer's Plant Site except that Buyer agrees to pay seller an amount equivalent to 10% of any emissions credits in excess of \$1.5 million received by Buyer over the duration of

this Agreement that are associated with the offsite use of the Excess Biogas in Buyer's offsite facilities.

- 5.4 <u>CEC Grant</u>. Seller shall be entitled to ten percent (10%) of any grant moneys received by Buyer from the California Energy Commission associated with the February 6, 2007 grant application net of any corresponding reduction to the SGIP funds on account of the CEC Grant.
- 5.5 <u>California Self-Generation Incentive Program (SGIP) Funds</u>. Buyer shall be solely entitled to all financial considerations associated with the California Self-Generation Incentive Program Fund and the installation of fuel cell technology on the Buyer's sites, both on and off the Seller's site.
- 5.6 Other Credits, Grants, Alternative Energy Subsidies or Tax Credits. Except as expressly provided, Buyer shall be solely entitled to all other financial consideration associated with the sale or use of the Excess Biogas including but not limited to any other credits, grants, subsidies or tax credits associated with the Biogas, Product or fuel cell energy production including, section 45 tax credits.
- Other Products. In the event that Buyer develops additional commercial markets for product streams recovered from the Excess Biogas other than those methane based Products contemplated herein (for example, sale of purified CO2 based products), Buyer agrees to share a portion of the value generated from these new product streams with Seller at a percentage to be negotiated in the future, and Seller agrees to work in good faith to enable Buyer to recover and remove these new product streams from Buyer's Plant Site. In no way will Seller be obligated to consent to the removal of these new product steams if Seller determines, in Seller's sole discretion, that the recovery or removal of these new product streams would negatively impact Seller's Plant or associated operations.

6. RECORDS AND AUDIT

- 6.1 Records. Buyer and Seller will each establish and keep at all times, true and accurate books, records and accounts relating to the performance of their obligations under this Agreement following generally accepted accounting principles (the "Records") and make such Records available for audit by the other party as set forth herein. All Records and any information contained therein and to the extent applicable to a party's performance of its obligations under this Agreement, including, but not limited to information concerning prices and payments made under this Agreement, are, to the extent applicable, subject to the California Public Records Act.
- 6.2 Audit. The Seller retains the right to review and audit, and the reasonable right of access to Buyer's and any subcontractor's premises to review and audit the Buyer's Records which are relevant to compliance with the provisions of this Agreement. The Seller retains the right to inspect and photocopy same, and to retain copies, outside of the

Buyer's premises, of any and all such Records with appropriate safeguards, if such retention is deemed necessary by the Seller in its sole discretion. This information shall be kept by the Seller in the strictest confidence allowed by law.

- 6.3 Cost Audit. If there is a claim for additional compensation by either Party, the other Party shall be permitted to examine books, records, documents, and any and all other evidence and accounting procedures and practices that are reasonably necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred.
- 6.5 <u>Time</u>. The rights and obligations under this Section shall continue throughout the term of this Agreement and for one year following its termination.

7. TAXES

- 7.1 Real and Personal Property. Buyer shall pay all property taxes imposed on Buyer's Plant as provided in the Lease.
- 7.2 <u>Sales or Use Taxes</u>. Seller shall credit Buyer for any sales or use taxes Buyer is required to pay on account of its purchase of the Biogas from Seller.

8. REPRESENTATIONS AND WARRANTIES

- 8.1 Seller represents and warrants to Buyer and covenants to Buyer at all times during the term of this Agreement as follows:
 - 8.1.1 Seller has title to all Biogas Delivered to Buyer under this Agreement, and Seller has the right to sell the Biogas to Buyer, which is Delivered free from any liens and encumbrances; and
 - 8.1.2 Seller covenants that Seller will procure and maintain in force all licenses, consents, permits and approvals required for Seller's production and sale of the Biogas from Seller to Buyer.

- 8.2 Of Buyer represents and warrants to Seller and covenants to Seller at all times during the term of this Agreement as follows:
 - 8.2.1 Buyer has the right to purchase the Biogas from Seller, and to Produce the Product; and
 - 8.2.2 Buyer covenants that Buyer will procure and maintain in force all licenses, consents, permits and approvals required for Buyer's production and sale of the Product.

9. CLAIMS

Any claims for breach of this Agreement or the representations or warranties set forth herein, must be made promptly after a party discovers grounds therefor, but in no event later than one year after the cause of action has occurred, and the party upon whom claim is made shall have thirty (30) days to investigate any such claim before the claimant may resort to any other remedy provided in this Agreement.

10. RISK OF LOSS

Title to, and risk of loss of, Biogas shall pass to Buyer when the Biogas is Delivered to Buyer's Plant. Buyer assumes all risk of loss of Buyer's Plant except to the extent such loss may be caused by the negligence of the Seller.

11. FORCE MAJEURE

- Force Majeure. Other than in respect of a payment of money due, neither party shall 11.1 have any liability to the other for failure to perform its obligations, delay, or loss occasioned by any circumstance, event or occurrence beyond the reasonable control of the affected party ("Force Majeure"). Force Majeure events may include any event or circumstance arising or occurring beyond the reasonable control of Seller or Buyer, which prevent it from performing its obligations under this Agreement including without limiting the generality of the foregoing: (1) any acts of God, including, but without restricting the generality thereof, lightning, earthquakes, storms, epidemics, landslides, floods, fires, explosions or washouts; (2) any strikes, lockouts or other industrial disturbances: (3) any acts of the enemies of the state, sabotage, wars, blockades, insurrections, riots, civil disturbances, arrests of restraints; (4) any freezing, explosions, craterings, breakage of equipment, forced maintenance shutdown or inability to obtain materials or equipment which by the exercise of due diligence, such party could not have prevented or is unable to overcome; (5) any orders of any court or government authority, which physically limit the production or transportation of or alter the specifications of Gas or Product, respectively; or (6) any acts or omissions (including failure to take Product) of a transporter or carrier of Product, which are caused by any event or occurrence of the nature described in this Article.
- 11.2 Effect of Non-Performance. If a party is unable to perform any obligation in this Agreement because of Force Majeure, then the obligations of that party shall be suspended to the extent and for the period of such Force Majeure condition, provided that: (1) the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure event; (2) the affected party uses reasonable endeavors to avoid and reduce the effects of the Force Majeure event, and to resume performance of its obligations; and (3) the affected party gives prompt written notice to the other party setting out the nature of the event of Force Majeure, the impact it will have on performance, and its expected duration, and provides status updates whenever there is any significant change.
- 11.3 <u>Termination for Force Majeure.</u> In the event that Force Majeure shall continue for a period of twelve (12) months from the date the party claiming relief under this Article gives the other party notice, Buyer and Seller shall have the right to terminate this Agreement by furnishing written notice to the other party, with termination effective upon the expiration date of such twelve (12) month period. Upon such termination, each party shall be relieved from its respective obligations, except for obligations for payment of monetary sums which arose prior to the event of Force Majeure.

12. LIABILITY, INSURANCE & INDEMNITY.

12.1 Consequential and Direct Damages

In no event shall either party be liable to the other for any indirect, incidental, special or consequential damages, including, but not limited to, lost profits, loss of use or business interruptions, under any circumstances, caused by or arising out of, in whole or in part, any negligent act or omission, even if advised of the possibility of such damages, unless and except as may be expressly set forth below:

- 12.1.1 Fines imposed on a party and that are caused by the other party's breach of this Agreement or its negligence.
- 12.1.2 Net cost of utility purchased electricity and lost revenue from interruptions to the Gas Utilization Facility sales to utility

A party's direct damages may include, but is not necessarily limited to, its internal or contracted direct labor, equipment, and material costs reasonably and necessarily incurred to overcome or mitigate the other party's breach or negligence.

12.2 Indemnity.

- 12.2.1 To the fullest extent permitted by law (including, without limitation, California Civil Code Section 2782.8), Buyer shall defend (with legal counsel reasonably acceptable to Seller), indemnify and hold harmless Seller and its officers, agents, departments, officials, representatives and employees from and against all claims, losses, costs, damages, injuries (including, without limitation, injury to or death of an employee of a party or its subcontractors), expense and liability of every kind, nature and description (including, without limitation, court costs, attorney's fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) that arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, and to the extent caused by, the negligence, recklessness, or willful misconduct of Buver, its subcontractors, anyone directly or indirectly employed by them, or anyone that they control, provided however, that upon completion of defense by Buyer of actions or claims against Seller, its agents, officers, employees, or representatives. Buyer shall have no duty to indemnify Seller, its agents, officers, employees, or representatives for costs, damages, injuries (including, without limitation, injury to or death of an employee of a party or its subcontractors), expense and liability of every kind arising from the established comparative negligence of Seller, its agents, officers, or employees or representatives.
- 12.2.2 The provisions of this Section 12.2 are not limited by the provisions of Section 12.3 Buyer's Insurance.
- 12.2.3 Each party agrees to pay any and all costs the other party incurs enforcing the indemnity and defense provisions set forth in Section 12.1.1.

12.3 Buyer's Insurance

12.3.1 Policies and Procedures - Buyer shall, at it or its subcontractor's sole cost and expense, procure insurance against claims for loss including injuries to persons or damage to property, which may arise out of or in connection, with the performance hereunder by the Buyer, Buyer's agents, representatives, officers, employees. Buyer agrees to require any subcontractors retained for the performance of this Agreement to maintain all required insurance under this section, or such type and limit of coverage that may be commercially reasonable for the type and scope of work to be performed by such subcontractor. Buyer shall maintain this insurance for the duration of this Agreement. Buyer's liabilities. including but not limited to Buyer's indemnity obligations, under this Contract shall not be deemed limited in any way to the insurance coverage required herein. Buyer shall not begin any construction work at the Plant Site under this Agreement until it has provided and the Seller has approved all required insurance. Except as provided for under California law, all policies of insurance required hereunder must provide that the Seller is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies. Maintenance of specified insurance coverage is a material element of this Agreement and Buyer's failure to maintain or renew coverage or to provide evidence of renewal during the term of this Agreement may be treated as a material breach of contract by Seller.

12.3.2 Types of Insurance -

12.3.2.1 Commercial General Liability Insurance - Buyer shall provide at its expense a policy or policies of Commercial General Liability (CGL) Insurance which shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse) independent contractors, products/completed operations, personal injury and advertising injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract). Buyer shall maintain the same or equivalent CGL Insurance as described herein for at least two (2) years following termination of the Agreement. Policy coverage shall in liability limits of not less than the following:

Limits of Liability

General Liability Limit (Except Products/Completed Operations) each occurrence/annual aggregate

\$3,000,000

Products/Completed Operations Aggregate Limit

Personal Injury Limit \$2,000,000 Each Occurrence \$2,000,000

\$3,000,000

12.3.2.2 Commercial Automobile Liability Insurance - Buyer shall provide at its expense a policy or policies of Commercial Automobile Liability Insurance providing coverage at least as broad in the amount of \$2,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned and hired automobiles ("Any Auto").

12.3.2.3 Workers' Compensation Insurance And Employers Liability Insurance Buyer shall provide at its expense Workers' Compensation Insurance and Employers Liability Insurance to protect the Buyer against all claims under applicable state workers compensation laws. The Seller, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by the failure of the Buyer to comply with the requirements of this section. Limits for this insurance shall be not less than the following:

Workers' Compensation Statutory

Employers Liability

Bodily Injury by Accident \$1,000,000 each accident
Bodily Injury by Disease \$1,000,000 each employee
Bodily Injury by Disease \$1,000,000 policy limit

By executing this Agreement, Buyer certifies to the following:

"I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance, in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of the Contract."

12.3.3 Rating Requirements - Except for the State Compensation Insurance Fund, all insurance required by this Agreement as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State of California, and that have been approved by the Seller.

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12.3.3.1 Non-Admitted Carriers - The Seller will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Eligible Surplus Lines Insurers (LESLI list).

> All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

12.3.4 Evidence of Insurance - The Buyer shall furnish to the Seller documents, including but not limited to certificates of insurance and endorsements, or equivalent of certificates, as evidence for the insurance required herein. In this regard, Buyer shall provide Seller with access to the website maintained by Buyer's insurance broker which includes memoranda of insurance coverage for Buyer.

12.3.5 Policy Endorsements

12.3.5.1 Commercial General Liability Insurance

12.3.5.1.1 Additional Insured - The policy or policies must be endorsed or otherwise structured to include as an additional insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives but only to the extent of Buyer's indemnity and performance obligations under this Agreement. The coverage shall include defense and liability arising out of: (a) Ongoing operations performed by Buyer or on its behalf, (b) Buyer's products, (c) Buyer's work, including but not limited to Buyer completed operations performed by Buyer or on its behalf, or (d) premises owned, leased, controlled, or used by Buyer. These endorsements shall not provide any duty of indemnity coverage for the established negligence of the Seller or its respective elected officials, officers, employees, agents, subcontractors and representatives.

- 12.3.5.2 Commercial Automobile Liability Insurance The Commercial General Automobile Policy required under Section 12.3.2.2 shall contain an endorsement on Industry Form MCS-90 for both Buyer and Seller for hazardous material transportation and pollution liability
 - Additional Insured The policy or policies under Section 12.3.2.2 must be endorsed to include as an additional insured the Seller and its respective elected officials, officers, employees, agents, and representatives, with respect to defense and liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the

- OC0688 Buyer; Except provided that this endorsement shall not provide any duty of indemnity coverage for the established negligence of the Seller or its respective elected officials, officers, employees, agents, subcontractors and representatives.
 - 12.3.5.3 Waiver Of Subrogation The policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the Seller, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the Buyer pursuant to this agreement.
- 12.3.6 Deductibles/Self-Insured Retentions Buyer shall be responsible for the payment of all deductibles and self-insured retentions.
- 12.3.7 Notice Of Changes To Insurance Buyer shall notify the Seller 30 days prior to any material change to the policies of insurance provided under this Agreement.
- 12.3.8 Restriction on Start of Site Work The Buyer shall not perform any construction work at the Plant Site work unless the Buyer has in full force and effect all required insurance. The Buyer shall not allow any subconsultant and subcontractor, supplier, or other organization to perform work at the Plant Site unless the worker's compensation requirements have been met.

12.3.9 Additional Insurance

12.3.9.1 Workers' Compensation Insurance For Work In, Over, Or Alongside Navigable Waters -

In addition to the Workers' Compensation Insurance required under this Agreement, Buyer shall provide additional insurance coverage for claims brought under the Longshore and Harbor Workers' Compensation Act, the Jones Act, general maritime law, and any other federal or state laws, resulting from Contractor's work in, over, or alongside navigable waters.

13. TERM AND TERMINATION

13.1 <u>Term.</u> Unless terminated earlier pursuant to this Article 13 or Article 2 herein, this Agreement shall be effective on the Effective Date and shall remain in full force and effect for an initial term ending on the tenth (10th) anniversary of the <u>earlier</u> of the (i) Initial Operations Date; or (2) fifteen (15) months after the Effective Date. The Parties may by written agreement extend this Agreement for one, five or ten years.

- 13.2 <u>Termination</u>. Notwithstanding anything herein contained, this Agreement may be terminated by either party without compensation to the other upon written notice:
 - 13.2.1 By Seller at no expense to Seller at any time after the end of the fifth Contract Year if in Seller's sole discretion, Seller determines that such termination is in Seller's best interest for any of the following reasons:
 - .1 regulatory compliance;
 - .2 operational efficiencies and/or constraints on its processes;
 - .3 space constraints; or
 - .4 the Seller's actual costs of continuing as shown by reasonable evidence exceed the revenues received from the Biogas Sales;

Buyer expressly acknowledges: (a) that Seller's wastewater plant operations are cost-sensitive, regulated activities, (b) that the regulation of Seller's wastewater plant operations is ongoing and subject to change, and (c) that Seller expressly reserves prerogatives in the future, at least five years from the Initial Operation Date, as to how Seller will maintain both regulatory compliance and cost-effective operations of the wastewater plant. Buyer accordingly agrees that Seller's right to terminate under this subsection shall be in Seller's sole and absolute discretion and without recourse by Buyer. Section 2.7 of this agreement shall remain applicable if Seller exercises its right of termination under this subsection. If Seller exercises its rights to terminate under this subsection, Seller shall provide Buyer written notice of not less than 180 days before effective date of termination

- 13.2.2 By either party in the event the other party commits a material breach of any of its obligations hereunder and fails to cure such breach within thirty (30) days following receipt of a notice from the non-breaching party (which notice must specify in reasonable detail the breach complained of unless such breach cannot be cured within such thirty (30) day period and the defaulting party is diligently pursuing such curative action until the breach is cured);
- 13.2.3 Upon termination of the Lease or by either party if there occurs an event of default under the Lease and such default continues beyond any applicable cure period;
- 13.2.4 By either party if the other party becomes the subject of any bankruptcy, insolvency or similar proceedings, or makes a general assignment for the benefit of creditors; or
- 13.2.5 By either party if any legislation, regulations, or decision of a Federal, State or Municipal government or of any agency thereof are implemented, repealed or altered in such a way as to significantly prevent either party from lawfully exercising or performing its obligations hereunder.

14. ASSIGNMENT

- 14.1 This Agreement is not assignable by either Seller or Buyer except with the written consent of the other party; provided, however, that such consent shall not be unreasonably withheld or delayed; and provided further, that upon written notice (1) either party may assign this Agreement, without the consent of the other party, to a party acquiring all or substantially all of its business or operations with respect to which this Agreement relates or (2) Buyer may assign this Agreement or any of its rights hereunder to any affiliate. No such sale, assignment or other transfer of any rights of a party hereunder shall be effective unless the purchaser, assignee or transferee assumes such party's obligations under this Agreement.
- 14.2 Intent to Assign. This Agreement involves improvement to property owned by the Seller (Metropolitan Wastewater Department), said property being a component of the Metropolitan Sewerage System owned and operated by the Seller. Present ownership notwithstanding, the State of California established a new public agency, the SAN DIEGO AREA WASTEWATER MANAGEMENT DISTRICT ("DISTRICT"), which is intended to take and assume from the Seller the rights, title, and interest in the Metropolitan Sewerage System, and to accept and honor all duties with respect to same, including the rights and responsibility described in this Agreement. Therefore the Buyer is hereby notified, and by execution of this Agreement expressly agrees, that upon the condition that the DISTRICT is established, and upon written notice to the Buyer the Seller shall have the unilateral right to assign all its rights an delegate all its duties under this Agreement to the DISTRICT, which in such event, will immediately assume the role of Seller and shall thereafter bear all of the Seller's rights and responsibilities under this Agreement, and the City of San Diego ("CITY") shall then be fully and forever discharged from same. Such right to assignment shall be effective for any and all claims which may be made by the Buyer, whether such claims be made before or after the date of assignment. Nothing in this provision shall be construed to impose upon the Seller a duty to assign this Agreement if the DISTRICT is established; such assignment may be made at the CITY's sole discretion.

15. CONFIDENTIALITY & INTELLECTUAL PROPERTY.

15.1 Confidential Information. To the fullest extent permitted by law, recognizing that Seller is a public entity and subject to certain requirements regarding public disclosure of non-propriety information, the parties agrees to hold and treat as secret and confidential throughout the term of this Agreement any and all proprietary and confidential information disclosed by the other party (the "Disclosing Party") to the other party (the "Receiving Party") including, but not limited to, know-how, procedures, operating techniques, customer lists or identities, equipment specifications, analytical specifications, process designs, drawings, prints, technical information and data, business, financial, pricing or other trade information ("Confidential Information") in

writing, or, if disclosed orally, confirmed in writing to be confidential, using with respect to such Confidential Information the same standards and procedures which Receiving Party applies to its own confidential information. Notwithstanding the foregoing, "Confidential Information" shall not include information which: (i) at the time of the disclosure, is a part of the public domain; (ii) subsequently becomes a part of the public domain by publication or otherwise through no fault of the party disclosing the information; (iii) the Receiving Party can show was contained in writing in its possession at the time of disclosure, which information had not been wrongfully acquired, directly or indirectly, from the Disclosing Party and with respect to which no obligation of confidentiality exists; (iv) is substantially disclosed to Receiving Party by a third party not in violation of any rights of, or obligations to, the Disclosing Party hereto; or (v) is required to be disclosed by law, including but not limited to the California Public Records Act; provided that, for each of the foregoing exceptions, the Receiving Party provides the Disclosing Party with written documentation evidencing the same upon request of the Disclosing Party.

- 15.2 <u>Legally required disclosure</u>. The foregoing to the contrary notwithstanding, if disclosure of any Confidential Information of the Disclosing Party is legally required to be made by the Receiving Party in or pursuant to a judicial, administrative or governmental proceeding or order or similar proceeding or order of a self-regulatory organization, the Receiving Party may make such disclosure but only to the extent required to comply with the law; provided, however, that if required, Receiving Party will cooperate if Disclosing Party seeks a protective order or other legal action to resist such disclosure and shall limit such disclosure to the minimum required.
- 15.3 <u>Intellectual Property</u>. Buyer shall be the sole owner of, and Seller shall acquire no rights in, any and all intellectual property associated with Buyer's Plant and its operations. Seller shall not have the right to use or reproduce any of Buyer's equipment, processes, operations or systems without the written consent of Buyer.

16. AUTHORIZED REPRESENTATIVES & NOTICES

- 16.1 <u>Authorized Representatives</u>. Until otherwise notified, the following shall be the Authorized Representatives of their respective parties with full authority to act on their behalf:
 - .1 Seller's Authorized Representative:

Name Director of San Diego Metropolitan Wastewater Department

Address 9192 Topaz Way, San Diego, CA 92123

Telephone (858) 292-6401 Facsimile (858) 292-6420

E-mail tbertch@sandiego.gov

.2 Buyer's Authorized Representative:

Name

Steven Eckhardt, Vice President New Business Development

Address

575 Mountain Avenue, Murray Hill, NJ 07974

Telephone Facsimile (908) 771-1151 (908) 771-4838

E-mail

Steve.Eckhardt@boc.com

Notices. Unless otherwise specifically provided for herein, all notices, consents, requests, demands and other communications required or permitted to be given pursuant to this Agreement shall be deemed to have been duly given upon receipt if delivered personally or sent by telex, telecopy, facsimile transmission, or certified mail (postage prepaid, return receipt requested) to the following, until another address or addressee shall be furnished in writing by either party, notices shall be given in duplicate, addressed as follows:

If to Seller:

Seller Authorized Representative per 16.1.1

With a copy to:

Attention: Thomas R. Alspaugh, Metropolitan Wastewater Department

Address: 9192 Topaz Way, San Diego, CA 92123

Telephone: (858) 654-4493 Facsimile: (858) 292-6310

If to Buyer:

Buyer Authorized Representative per 16.1.2

With a copy to:

The BOC Group, Inc. 575 Mountain Avenue Murray Hill, NJ 07974 Attention: Law Department Telephone: (908) 464-8100

Facsimile: (908) 771-1375

17. DISPUTE RESOLUTION

- 17.1 Mediation & Litigation. Any controversy or claim arising out of or relating to this Agreement, or to the performance by Buyer or Seller of their respective duties and obligations hereunder which cannot be otherwise resolved between the parties, shall be resolved first by mediation in accordance with the commercial mediation and arbitration rules of the American Arbitration Association and then by recourse to the courts of the State of California commercial mediation and California law.
- 17.2 <u>Continued Performance of Agreement</u>. During the existence of any dispute under this Agreement (including during any arbitration proceedings related thereto) each party shall continue to perform its obligations under this Agreement and neither party shall exercise any other remedy under this Agreement arising by virtue of the matters in dispute.

18. ADDITIONAL PROVISIONS

- Amendments. No amendment, modification, change, waiver or discharge of any provision of this Agreement, or any addition hereto, shall be effective unless the same is in writing and is signed or otherwise assented to in writing by an authorized individual on behalf of each party, and unless such writing specifically states that the same constitutes such an amendment, modification, change, waiver or discharge of one or more provisions of this Agreement or any addition hereto.
- 18.2 <u>Counterparts</u>. This Agreement may be executed in any number of counterparts with the same effect as if all parties to this Agreement had signed the same document and all counterparts will be construed together and constituted one and the same instrument.
- 18.3 <u>Costs Borne By Each Party</u>. Except as otherwise provided herein, each of the parties herein shall pay its own costs and expenses incurred in the negotiation, preparation and execution of this Agreement and of all documents referred to in it and in carrying out the transactions contemplated hereby and thereby.
- 18.4 <u>Cumulative Remedies.</u> Unless otherwise specifically provided herein, the rights, powers, and remedies of each of the parties provided herein are cumulative and the exercise of

any right, power or remedy hereunder do not affect any other right, power or remedy that may be available to either party hereunder or otherwise at law or in equity.

- 18.5 Entire Agreement. This Agreement, including the attached Exhibits, together with the Lease: 1) sets forth the entire agreement between Buyer and Seller with respect to the purchase and sale of Biogas for Delivery to Buyer's Plant; and 2) supersedes and cancels all prior and contemporaneous agreements and understandings between the parties, whether oral or written, relating to the purchase and sale of Biogas for Delivery to Buyer's Plant. In the event and to the extent of any conflict or inconsistency between this Agreement, the Lease, the Scope of Work, and other exhibits to the agreements the order of precedence shall be this Agreement, the Lease, the Scope of Work, and any other attachments to the agreements.
- 18.6 <u>Faithful Performance</u>. The parties shall faithfully perform and discharge their respective obligations in this Agreement and endeavor in good faith to negotiate and settle all matters arising during the performance of this Agreement not specifically provided for.
- 18.7 <u>Governing Law.</u> The parties agree that this Agreement will be governed by the laws of the State of California without regard to its conflicts of law rules.
- 18.8 <u>Independent Contractors.</u> At no time shall Seller be an agent of Buyer nor shall Buyer be an agent of Seller. This Agreement shall not create a joint enterprise or create in any respect a partnership between the parties. In all of their respective operations hereunder each party shall act as an independent contractor. In no event shall Buyer attempt to bind Seller with any representation, guarantee or warranty concerning any Product produced by Buyer hereunder.
- 18.9 <u>Non-Waiver of Future Default</u>. No waiver by either party of any default by the other party in the performance of any of the provisions of this Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or of a different character.
- 18.10 <u>Severability.</u> Any provision of this Agreement which is or becomes prohibited or unenforceable in any jurisdiction shall not invalidate or impair the remaining provisions of this Agreement which shall be deemed severable from the prohibited or unenforceable provisions and any prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable that provision in any other jurisdiction.
- 18.11 Equal Opportunity Contracting Program. Buyer shall comply with the City of San Diego's Nondiscrimination in Contracting Ordinance, San Diego Municipal Code Sections 22.3501 through 22.3517. Buyer and all subcontractors for Buyer shall comply with the City of San Diego's Equal Employment Opportunity Outreach Program, San Diego Municipal Code Sections 22.2701 through 22.2707. Buyer shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or

EXHIBIT C

SCOPE OF WORK

POINT LOMA WASTEWATER TREATMENT PLANT BENEFICIAL USE OF DIGESTER GAS

000696 DETAILED SCOPE OF WORK FOR THE BENEFICIAL USE OF DIGESTER GAS AT THE POINT LOMA WASTEWATER PLANT

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- (g) Amendments, Changes, and Modifications. This Guarantee may not be amended, changed, modified, or terminated and none of its provisions may be waived, except with the prior written consent of the City and of the Parent Guarantor.
- Liability. It is understood and agreed to by the City that nothing contained herein shall create any obligation of or right to look to any director, officer, employee, or stockholder of the Parent Guarantor (or any Affiliate thereof) for the satisfaction of any obligations hereunder, and no judgment, order, or execution with respect to or in connection with this Guarantee shall be taken against any such director, officer, employee, or stockholder.
- Notices. All notices, demands, requests, and other communications hereunder shall (i) be deemed sufficient and properly given if in writing and delivered in person to the following addresses or sent by first class mail and facsimile. To such addressee:

If to the Parent Guarantor:

Name

General Counsel

The BOC Group, Inc.

Address

575 Mountain Avenue, Murray Hill, NJ 07974

Facsimile

(908) 771-4775

If to the City:

Name

Director of San Diego Metropolitan Wastewater Department

Address

9192 Topaz Way, San Diego, CA 92123

Telephone

(858) 292-6401

Facsimile

(858) 292-6420

E-mail

tbertch@sandiego.gov

Either party may, by like notice, designate further or different addresses to which subsequent notices shall be sent. Any notice hereunder signed on behalf of the notifying party by a duly authorized attorney at law shall be valid and effective to the same extent as if signed on behalf of such party by a duly authorized officer or employee. Notices and communications given by mail hereunder shall be deemed to have been given five days after the date of dispatch; all other notices shall be deemed to have been given upon receipt.

IN WITNESS WHEREOF, the Parent Guarantor has caused this Guaranty to be executed in its name and on its behalf by its duly authorized officer as of the date first written above.

Accepted and Agreed to by:

THE BOC GROUP, INC.

Printed Name:

Printed Name: Robert Wowk Title: Chref Financial Officer

Title:

resolution after which, however, Parent Guarantor shall be obligated under this Guarantee for any award or judgment that may be assessed against the Company.

3. Miscellaneous.

- (a) Consolidation, Merger, Sale, or Transfer: The Parent Guarantor covenants that during the terms of this Guarantee it will maintain its corporate existence, will not dissolve or otherwise dispose of all or substantially all of its assets, and will not consolidate with or merge into another entity or permit one or more other entities to consolidate with or merge into it unless the successor is the Parent Guarantor; provided, however, that the Parent Guarantor may consolidate with or merge into another entity, or permit one or more other entities to consolidate with or merge into it, or sell or otherwise transfer to another entity all or substantially all or any of its assets and thereafter dissolve, or not, if the successor entity (other than the Parent Guarantor): (i) assumes in writing all obligations of the Parent Guarantor hereunder and, if required by law, is duly qualified to do business in the State of California; and (ii) has adequate financial assets under United States Generally Accepted Accounting Principles to meet the obligations of the Parent Guarantor hereunder.
- (b) Continuance of Obligations: If a consolidation, merger, or sale or other transfer is made as permitted by this Section, the provisions of this Section shall continue in full force and effect and no further consolidation, merger, or sale or other transfer shall be made except in compliance with the provisions of this Section. No such consolidation, merger, or sale or other transfer shall have the effect of releasing the Guarantor from its liability hereunder unless a successor entity has assumed responsibility for this Guarantee as provided in this Section.
- (c) <u>Assignment</u>: Without the prior written consent of the City, this Guarantee may not be assigned by the Parent Guarantor, except pursuant to Section 3(a) hereof.
- (d) <u>Qualification in California</u>. The Parent Guarantor agrees that, so long as this Guarantee is in effect, if required by law, the Parent Guarantor will be duly qualified to do business in the State of California.
- (e) <u>Consent to Jurisdiction</u>. The Parent Guarantor irrevocably: (i) agrees that any legal proceeding arising out of this Guarantee shall be brought in the state or federal courts in San Diego County, California, having appropriate jurisdiction; (ii) consents to the jurisdiction of such court any such legal proceeding; (iii) waives any objection which it may have to the laying of the jurisdiction of any such legal proceeding in any of such courts.
- (f) <u>Binding Effect</u>. This Guarantee shall inure to the benefit of the City and its permitted successors and assigns and shall be binding upon the Parent Guarantor and its successors and assigns.

- all demands upon the Company or any other person and all other formalities the omission of which, or delay in performance of which, might but for the provisions of this Section, by rule of law or otherwise, constitute grounds for relieving or discharging the Parent Guarantor in whole or in part from its absolute, present, irrevocable, unconditional, and continuing obligations hereunder.
 - (e) Payment of Costs and Expenses: The Parent Guarantor agrees to pay the City on demand all reasonable costs and expenses, legal or otherwise (including counsel fees), incurred by or on behalf of the City in successfully enforcing by Legal Proceeding observance of the covenants, agreements, and obligations contained in this Guarantee against the Parent Guarantor, other than the costs and expenses that the City incurs in performing any of its obligations under the BUDG Project Agreements where such obligations are a condition of performance by the Company of its Obligations.
 - (f) Subordination of Rights: The Parent Guarantor agrees that any right of subrogation or contribution which it may have against the Company as a result of any payment or performance hereunder is hereby fully subordinated to the rights of the City hereunder and that the Parent Guarantor shall not recover or seek to recover any payment made by it hereunder from the Company and the Company and the Parent Guarantor have fully and satisfactorily paid or performed and discharged the Obligations giving rise to a claim under this Guarantee.
 - (g) Separate Obligations: Reinstatement: The obligations of the Parent Guarantor to make any payment or to perform and discharge any other duties, agreements, covenants, undertakings, or obligations hereunder shall (i) to the extent permitted by applicable law, constitute separate and independent obligations of the Parent Guarantor from its other obligations under this Guarantee; (ii) give rise to separate and independent causes of action against the Parent Guarantor; and (iii) apply irrespective of any indulgence granted from time to time by the City. The Parent Guarantor agrees that this Guarantee shall be automatically reinstated if and to the extent that for any reason any payment or performance by or on behalf of the Company is rescinded or must be otherwise restored by the City, whether as a result of any proceedings in bankruptcy, reorganization, or similar proceeding, unless such rescission or restoration is pursuant to the terms of the BUDG Project Agreements, or the Company's enforcement of such terms under applicable law.
 - (h) <u>Term</u>: This Guarantee shall remain in full force and effect from the date of execution and delivery hereof until all of the Obligations of the Company have been fully paid and performed.
 - (i) <u>Disputes relating to BUDG Project Agreements</u>: In the event of any dispute under the BUDG Project Agreements that relates to claim under this Guarantee, which dispute is submitted to dispute resolution as provided in the BUDG Project Agreements, the obligations of this Guarantee shall be suspended pending the outcome of such dispute

otherwise affect the Company's Obligations, the Parent Guarantor's obligations under this Guarantee shall be treated the same.

- (c) <u>Defenses, Set-Offs. and Counterclaims</u>: Notwithstanding any provision contained herein to the contrary, the Parent Guarantor shall be entitled to exercise or assert any and all legal or equitable rights or defenses which the Company may have under the BUDG Project Agreements, or under Applicable Law (other than bankruptcy or insolvency of the Company and other than any defense which the Company has expressly waived in the BUDG Project Agreements or the Parent Guarantor has expressly waived in Section 2(d) hereof or elsewhere hereunder), and the obligations of the Parent Guarantor hereunder are subject to such counterclaims, set-offs, or deductions which the Company is permitted to assert pursuant to the BUDG Project Agreement, if any.
- (d) <u>Waivers by the Parent Guarantor</u>: The Parent Guarantor hereby unconditionally and irrevocably waives:
 - (1) notice from the City of its acceptance of this Guarantee;
 - (2) notice of any of the events referred to in Section 2(b) hereof except to the extent that notice is required to be given as a condition to the enforcement of Obligations;
 - (3) to the fullest extent lawfully possible, all notices which may be required by statute, rule of law, or otherwise to preserve intact any rights against the Parent Guarantor, except any notice to the Company required pursuant to the BUDG Project Agreements or applicable law as a condition to the performance of any Obligation;
 - (4) to the fullest extent lawfully possible, any statute of limitations defense based on a statute of limitations period which may be applicable to guarantors (or parties in similar relationships) which would be shorter than the applicable statute of limitations period for the underlying claim;
 - (5) any right to require a proceeding first against the Company:
 - (6) any right to require a proceeding first against any person or the security provided by or under the BUDG Project Agreements to the extent such Agreements specifically require a proceeding first against any person (except the Company) or security;
 - (7) any requirement that the Company be joined as a party to any proceeding for the enforcement of any term of the BUDG Project Agreements;
 - (8) the requirement of, or notice of, the filing of claims by the City in the event of the receivership or bankruptcy of the Company; and

- extent and with the same force and effect as if any such proceeding had not been instituted and as if no rejection, stay, termination, assumption, or modification has occurred as a result thereof, it being the intent and purpose of this Guarantee that the Parent Guarantor shall and does hereby waive all rights and benefits which might accrue to it by reason of any such proceeding);
 - (7) except as permitted by Section 3 hereof, any sale or other transfer by the Parent Guarantor or any Affiliate of any of the capital stock or other interest of the Parent Guarantor or any Affiliate of the Company now or hereafter owned, directly or indirectly, by the Parent Guarantor or any Affiliate, or any change in composition of the interest in the Company;
 - (8) any failure on the part of the Company for any reason to perform or comply with any agreement with the Parent Guarantor;
 - (9) the failure on the part of the City to provide any notice to the Parent Guarantor which is not required to be given to the Parent Guarantor pursuant to this Guaranty and to the Company as a condition to the enforcement of Obligations pursuant to the BUDG Project Agreements.
 - (10) subject to Section 2(c) below, any failure of any party to the BUDG Project Agreements to mitigate damages resulting from any default by the Company or the Parent Guarantor under the BUDG Project Agreements;
 - (11) the merger or consolidation of any party to the BUDG Project Agreements into or with any other person, or any sale, lease, transfer, abandonment, or other disposition of any or all of the property of any of the foregoing to any person;
 - (12) any legal disability or incapacity of any party to the BUDG Project Agreements; or
 - (13) the fact that entering into any BUDG Project Agreements by the Company or the Parent Guarantor was invalid or in excess of the powers of such party.

Should any money due or owing under this Guarantee not be recoverable from the Parent Guarantor due to any of the matters specified in subparagraphs (1) through (13) above, then in any such case, such money, together with all additional sums due hereunder, shall nevertheless be recoverable from the Parent Guarantor as though the Parent Guarantor were principal obligor in place of the Company pursuant to the terms of the BUDG Project Agreements, and not merely a guarantor, and shall be paid by the Parent Guarantor forthwith subject to the terms of this Guarantee. Notwithstanding anything to the contrary expressed in this Guarantee, nothing in this Guarantee shall be deemed to amend, modify, clarify, expand, or reduce the Company's rights, benefits, duties, or obligations under the BUDG Project Agreements. To the extent that any of the matters specified in subparagraphs (1) through (6) and (8) through (14) would provide a defense to, release, discharge, or

Guarantor shall be effective and shall immediately be paid or performed. Notwithstanding the City's right to proceed directly against the Parent Guarantor, the City (or any successor) shall not be entitled to more than a single full performance of the obligations in regard to any breach or nonperformance thereof, and shall be subject to the provisions of Section 2(i) hereof.

- (b) Guarantee Absolute and Unconditional. The obligations of the Parent Guarantor hereunder are absolute, present, irrevocable, and unconditional and shall remain in full force and effect until the Company shall have fully discharged the Obligations in accordance with their respective terms, and except as provided in Section 2(c) hereof, shall not be subject to any counterclaim, set-off, deduction, or defense (other than full and strict compliance with, or release, discharge, or satisfaction of, such Obligations) based on any claim that the Parent Guarantor may have against the Company, the City, or any other person. Without limiting the foregoing, the obligations of the Parent Guarantor hereunder shall not be released, discharged, or in any way modified by reason of any of the following (whether with or without notice to, knowledge by, or further consent of the Parent Guarantor):
 - (1) the extension or renewal of this Guarantee or the BUDG Project Agreements up to the specified Terms of each agreement;
 - (2) any exercise or failure, omission, or delay by the City in the exercise of any right, power, or remedy conferred on the City with respect to this Guarantee or the BUDG Project Agreements except to the extent such failure, omission, or delay gives rise to an applicable statute of limitations defense with respect to a specific claim;
 - (3) any permitted transfer or assignment of rights or obligations under the BUDG Project Agreements by any party thereto, or any permitted assignment, conveyance, or other transfer of any of interests in the BUDG facility;
 - (4) any renewal, amendment, change, or modification in respect of any of the Obligations or terms or conditions of the BUDG Project Agreements;
 - (5) any failure of title with respect to all or any part of the respective interests of any person in the Site or the Facility;
 - (6) the voluntary or involuntary liquidation, dissolution, sale, or other disposition of all or substantially all the assets, marshalling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, moratorium, arrangement, composition with creditors or readjustment of, or other similar proceedings against the Company or the Parent Guarantor, or any of the property of either of them, or any allegation or contest of the validity of this Guarantee or the BUDG Project Agreements in any such proceeding (it is specifically understood, consented and agreed to that, to the extent permitted by law, this Guarantee shall remain and continue in full force and effect and shall be enforceable against the Parent Guarantor to the same

- O0070 Breach of any law or governmental regulation applicable to Parent Guarantor, (ii) conflicts with, violates, or results in a breach of any term or condition of Parent Guarantor's corporate charter or by-laws or any judgment, decree, agreement, or instrument to which Parent Guarantor is a party or by which Parent Guarantor or any of its property or assets are bound, or constitutes a default under any such judgment, decree, agreement, or instrument, or (iii) to the Parent Guarantor's knowledge will result in the creation or imposition of any material encumbrance of any nature whatsoever upon any of the properties or assets of the Parent Guarantor, except as provided herein or in the BUDG Project Agreements.
- 2. Guarantee to the City: The Parent Guarantor hereby absolutely, presently, irrevocably, and unconditionally guarantees to the City for the benefit of the City (i) the full and prompt payment when due of each and all of the payments required to be credited or made by the Company under the BUDG Project Agreements (including all amendments and supplements thereto) to, or for the account of, the City, when same shall become due and payable pursuant to this Guarantee, and (ii) the full and prompt performance and observance of each and all of the Company's Obligations under the BUDG Project Agreements ("Obligations"). Notwithstanding the unconditional nature of the Parent Guarantor's obligations as set forth herein, the Parent Guarantor shall have the right to assert the defenses provided in Section 2(c) hereof against claims made under this Guaranty.
 - Right of City to Proceed Against Parent Guaranter. This Guarantee shall constitute a guarantee of payment and of performance and not of collection and the Parent Guarantor specifically agrees that in the event of a failure by the Company to pay or perform any obligation guaranteed hereunder, the City shall have the right to proceed first and directly against the Parent Guarantor under this Guarantee and without proceeding against the Company or exhausting any other remedies against the Company which the City may have. Without limiting the foregoing, the Parent Guarantor agrees that it shall not be necessary, and that the Parent Guarantor shall not be entitled to require, as a condition of enforcing the liability of the Parent Guarantor hereunder, that the City (i) file suit or proceed to obtain a personal judgment against the Company or any other person that may be liable for the obligations or any part of the Obligations; (ii) make any other effort to obtain payment or performance of the Obligations from the Company other than providing the Company with any notice of such payment or performance as may be required by the terms of the BUDG Project Agreements or required to be given to the Company under applicable law; (iii) foreclose against or seek to realize upon any security for the Obligations: or (iv) exercise any other right or remedy to which the City is or may be entitled in connection with the Obligations or any security therefore or any other guarantee thereof, except to the extent that any such exercise of such other right or remedy may be a condition to the Obligations of the Company or to the enforcement of remedies under the BUDG Project Agreements. Upon any unexcused failure by the Company in the payment or performance of any obligation and the giving of such notice or demand, if any, to the Company and Parent Guarantor as may be required in connection with such Obligations and this Guarantee, the liability of the Parent

This Guarantee Agreement is made and dated June 22, 2007, between The BOC Group Incorporated, a Delaware corporation ("BOC Group" or "Parent Guarantor"), and the City of San Diego, a California municipal corporation and charter city ("City").

Recitals

- A. The City and BOC Merchant Production, Inc., a Delaware corporation, concurrently herewith enter into: (1) a Biogas Purchase and Sale Agreement and (2) a BUDG Site Lease whereby Company has agreed to develop, install, and operate a Beneficial Use of Digester Gas biogas production facility on a leased site adjacent to sewage sludge digesters at City's Point Loma Wastewater Treatment Plant, and whereby City has agreed to sell, and Company has agreed to purchase, excess biogas conveyed by City from said digesters ("BUDG Project Agreements").
- B. The Company is a direct or indirect wholly owned subsidiary of Parent Guarantor.
- C. The City will enter into the BUDG Project Agreements with Company only if the Parent Guarantor guarantees the performance by the Company of all Company's responsibilities and obligations under the BUDG Project Agreements as set forth in this Guarantee Agreement (the "Guarantee").
- D. In order to induce the execution and delivery of the BUDG Project Agreements by the City and in consideration thereof, Parent Guarantor agrees as follows:

Guarantee

- 1. <u>Representations and Warranties of the Parent Guarantor</u>: The Parent Guarantor hereby represents and warrants as follows:
 - (a) Existence and Powers. The Parent Guarantor is a duly organized and validly existing as a corporation under the laws of Delaware, with full legal right, power, and authority to enter into and perform its obligations under this Guarantee.
 - (b) <u>Due Authorization and Binding Obligation</u>. The Parent Guarantor has duly authorized the execution and delivery of this Guarantee, and this Guarantee has been duly executed and delivered by the Parent Guarantor and constitutes its legal, valid, and binding obligation of the Parent Guarantor, enforceable against the Guarantor in accordance with its terms except insofar as the enforcement may be affected by bankruptcy, insolvency, moratorium, or by general equity principles of reorganization or other equitable principles affecting creditor's rights.
 - (c) No Conflict: Neither the execution or delivery by the Parent Guarantor of this Guarantee nor the performance by the Parent Guarantor of its obligations hereunder (i) to the Parent Guarantor's knowledge conflicts with, violates, or results in the

GUARANTEE AGREEMENT

From

THE BOC GROUP, INCORPORATED

To

THE CITY OF SAN DIEGO

Concerning

POINT LOMA BENEFICIAL USE OF DIGESTER GAS PROJECT – GAS PURCHASE AND SALE AGREEMENT AND SITE LEASE

Site Plan

See Exhibit "C", Scope of Work, Attachment A1

suppliers. Buyer shall provide equal opportunity for subcontractors to participate in subcontracting opportunities. Buyer understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions.

- 18.12 <u>Drug Free Workplace</u>. Buyer shall have in place a drug-free workplace program that complies with the requirements of the San Diego City Council Policy Number 100-17 regarding Drug-Free Workplace and shall ensure that each subcontract agreement having to do with the design, construction and operations of the Buyer's Plant contains language which indicates the subcontractors' agreement to abide by the provisions of the above referenced policy.
- 18.13 <u>Parent Guarantee</u>. Upon execution of this Agreement by the Seller, Buyer shall provide the Parent Guarantee from The BOC Group, Inc. as provided in Exhibit B.
- 18.14 Proposal for Fuel Cell Projects. Seller understands that Buyer is using the Excess Biogas in fuel cells located in the San Diego region and has pending agreements for all biogas the Buyer currently projects will be available. However, in due consideration or this transaction, if biogas becomes available for possible fuel cells to be located at a Seller's facilities excluding Miramar Landfills, the Buyer will notify the Seller in writing and the Seller may request a proposal from the Buyer within sixty (60) days from notification.
- 18.15 Excess Landfill Gas Owned by the City of San Diego (CITY). The CITY has issued public requests for proposals previously for their excess landfill gas and no projects were developed except at the CITY's Miramar Landfill. The CITY may request proposals for the use of this gas, excluding the CITY's Miramar Landfill, during the first five years of this contract without a public solicitation. Any requested proposal shall be submitted within one hundred twenty (120) days of the request. A request for proposal under this section does not give the Buyer any rights to this gas nor does it preclude the CITY from requesting other solicitations. Any proposal submitted by the Buyer will be good for one hundred eighty (180) days. If a proposal is requested and received and written records of active negotiations are not produced for 180 days after receipt of proposal, the Buyer and CITY shall relinquish any rights under this section.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the last date set forth below.



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ATTACHMENT A1: SITE PLAN AND REFERENCE DRAWINGS

ATTACHMENT A2: GENERAL PROJECT REQUIREMENTS

DETAILED SCOPE FOR THE BENEFICIAL USE OF DIGESTER GAS (BUDG) AT THE POINT LOMA TREATMENT PLANT

GENERAL

The Beneficial Use of Digester Gas (BUDG) project at the Point Loma Treatment Plant (PLWTP) Scope of Work (SOW) consists of the design, construction, financing, ownership and operations (Privatization) of the beneficial use of the excess digester gas produced by the PLWTP. The following describes the Buyer's SOW for the detailed design, permitting, construction, testing, startup, operation, maintenance, and financing of the system.

The Buyer shall be solely responsible for the performance, operation, and timely completion of the system.

Throughout this SOW, various abbreviations, terms, and acronyms are used. Terms are defined in the Agreement or are used here as generally used in the wastewater, natural gas or electrical industries. Abbreviations and acronyms are listed in Table A.1

Table A.1 ABBREVIATIONS, TERMS, AND ACRONYMS

APCD	San Diego County Air Pollution Control District
APSB	Agreement for the Purchase and Sale of Biogas

Biogas Methane gas mixture produced by biological decomposition (Digester gas)

Btu British terminal unit

Btu/hr British thermal units per hour

BUDG Beneficial Use of Digester Gas Project

CAL-EPA State of California Environmental Protection Agency

CEOA California Environmental Quality Act

CF Cubic Feet

CFR Code of Federal Regulations

CITY City of San Diego

CNTP Construction Notice to Proceed COMNET Wastewater Operations Network

County Health San Diego County Department of Environmental Health Services

CWP Clean Water Program for Greater San Diego (see MWWD)

CWP Guidelines Guidelines prepared by the City of San Diego for Design and Construction

DBA Decibels Absolute

DCS Distributed Control System

DHS State Department of Health Services

Digester Gas Methane gas produced by anaerobic decomposition of wastewater organic

materials

ED Environmental Documentation

EPA Environmental Protection Agency
ESD Environmental Services Department

GUF Gas Utilization Facility

JSA Job Safety Analysis (Project Safety Review)

MGD million gallons per day

MMBTU Million British Thermal Units

MWWD Metropolitan Wastewater Department (formerly CWP)

NEPA National Environmental Policy Act
NTP Notice to Proceed with Contract
MMSCF Million Standard Cubic Feet

MMSCFD Million Standard Cubic Feet Per Day
PLWTP Point Loma Wastewater Treatment Plant
P.O.C. Point of Connection (for on-site utilities)

POT A recognized sound testing/inspection procedure

Buyer(s) Designer/Builder/Owner/Operator
RWQCB Regional Water Quality Control Board
SDAPCD San Diego Air Pollution Control District
SWRCB State Water Resources Control Board

Scfh Standard cubic feet per hour

SOW Scope of Work SS Stainless Steel

WEO A recognized sound testing/inspection procedure

WWTP Wastewater Treatment Plant

SECTION 1 PROJECT DESCRIPTION

1.1 BUYER'S GENERAL RESPONSIBILITIES

The BUDG will be located at the PLWTP on the leased site, as illustrated in Attachment A1 and described in the BUDG Lease. Its purpose is to beneficially utilize the PLWTP's excess digester gas now being flared, without disruption to the PLWTP and to provide significant revenue to the Sewer Fund.

The Buyer will cooperate with the Seller by supplying all required system design, construction, startup, and operation's information required by the Seller to obtain any necessary approvals. The Buyer will be responsible for obtaining and complying with all federal, state, and local permits affecting the facility. Upon specific request, the Seller will supply the Buyer with any existing PLWTP drawings as needed for the design and construction of the project. Additional Buyer responsibilities are described in the General Requirements in Attachment A2.

1.1.1 Project Background

The PLWTP is located in San Diego, on City of San Diego Property adjacent to the Point Loma Naval Reserve. It treats approximately 80% of the Metropolitan Wastewater System flows and 85% of the system's solids. Seven (7) digesters process advanced primary wastewater solids producing approximately 3,000,000 cu ft. of digester gas per day at just over 600 BTU/ft³. Approximately 2,000,000 cu ft/day are utilized by an onsite power generation facility called the Gas Utilization Facility (GUF).

1.1.2 General Description

The Beneficial Use of Digester Gas project (BUDG) consists of the design, construction on removable skids, financing, ownership and operation of a process at the PLWTP to generate revenue for the Buyer by beneficially utilizing the available digester gas. The PLWTP will provide approximately 1,100,000 cu ft of digester gas per day with a methane content of approximately 63% with less than 60 ppm H₂S. The quantity and quality of gas deliveries will be regular and reasonably predicable, but not guaranteed. The Buyer will be responsible for all costs, including permitting and compliance with site issues, unless specified otherwise in the Agreement, Lease or SOW.

The BUDG project is to receive the excess PLWTP digester gas at the location indicated by the Seller, and utilize removable equipment to process, compress and load the gas into storage trailers for transport off-site, where it will be utilized as fuel for fuel cell power generation systems

1.1.3 Site Description

The BUDG project shall be located in the area south of Digester 8 indicated in the Attachment A and the BUDG Lease. The skid mounted equipment shall be mounted on

concrete slabs. Areas not covered with concrete shall be paved with asphalt, gravel or planted to match the existing PLWTP landscaping plan. The site shall have adequate lighting to allow for safe night time operations. The driveway to and from the site shall match the load bearing and appearance specifications for the plant road they are connecting to.

1.1.4 Process Description

The Buyer will receive the raw, saturated digester gas at a point within the existing PLWTP digester gas low pressure piping system. The Buyer will install skid-mounted equipment on the leased site described in Section 1.1.3 to process, compress, dry, clean, and filter this gas prior to loading it into tube trailers for transport off-site. The purified gas will be used in fuel cells at remote sites for renewable power generation. The Seller will not have any responsibility for or interaction with activities associated with these off-site fuel cell installations.

The BUDG system will be sized to take a minimum of 0.62 MMSCFD and a maximum of 1.6 MMSCFD of excess digester gas produced by the PLWTP. The feed gas will go through a low-pressure blower and an initial purification step to remove H2S, followed by compression to approximately 170 psig. The compressed gas will then go through process steps to remove water, VOC's, and other objectionable compounds, before entering a step to remove excess carbon dioxide. The resulting product gas will then either be used as fuel for an on-site 300 kw fuel cell to generate power for the process, or compressed to approximately 2600 psig for storage and/or transport. The storage and loading into tube trailers will be handled via a gas manifold system, which will allow loading and isolation of individual trailers for connection and disconnection for transport. When full, the individual tube trailers will be transported to local industrial or commercial sites where power generation systems will be installed, and the tube trailers will be connected to another gas manifold for offloading at the generation site.

Each remote generation site will consist of a 1.2 MW fuel cell installation, utilizing Fuel Cell Energy's molten carbonate fuel cell technology. The fuel cell will utilize the methane/carbon dioxide purified biogas as fuel, and will provide base load power to the industrial customer(s), as well as heat for the generation of steam, refrigeration, etc. Each generation site will be run independently, and will have natural gas grid back-up to the biogas fuel. In addition, the generation site(s) will have electrical grid backup to maintain reliability and flexibility. The generation sites will have separate contracts with the Buyer and will have no relationship legally to the Seller. The tube trailers, when empty, will be transported back to the PLWTP site and reconnected to the loading manifold system for filling. Six vehicle movements per day are expected. One vehicle movement consists of the delivery of an empty trailer to the PLWTP site, and the removal of a full trailer from the site.

Equipment on site at the PLWTP will consist of a pre-process blower, H2S removal bed, 1-stage compressor, condensers, PSA system for the removal of water vapor and some VOC's, refrigerated absorption bed, membrane CO2 removal unit, multi-stage

compressor, tube trailer loading manifold system, and possibly a product storage tank. Support equipment will include heat exchangers, refrigeration systems, controls, electrical distribution, safety purge gas system, a 300 kw fuel cell for generating operating power, and miscellaneous support items. There will also be a waste gas disposal flare system to treat the BUDG gaseous byproducts from the purification steps. The equipment footprint will fit within the area leased under an exclusive lease to the Buyer by the PLWTP, including the BUDG flare. Two other areas, both leased under non-exclusive leases, will be made available for the staging of tube trailers for loading. The first non-exclusive lease area, directly adjacent to the north edge of the exclusive BUDG leasehold, will be the primary site to be used for trailer loading. When this site is not available, a secondary non-exclusive lease site on the west side of Gatchell Road will be made available for trailer loading. The Buyer will provide a removable manifold system to be moved between these locations as needed.

The technologies utilized in this process are to be well known by the Buyer, with established performance and characteristics. They are to be the type of equipment and processes the Buyer operates on a daily basis.

All waste materials generated by the Buyer will be properly and legally disposed of by the Buyer. Waste materials generated will be limited to: general trash, spent compressor oil, spent absorption bed materials, condensate from the purification system and fuel cell condensate and wastes, and all gas byproducts. Excess digester gas which cannot be used by the Buyer (i.e. does not go through the Buyer's system) will remain the responsibility of the PLWTP.

The Buyer is to have no more than 4 trailer drop spaces; three are necessary to allow for continuous filling operations over a full shift which is not serviced by trailer transport exchanges. The fourth space is to have a place to drop off an empty trailer before picking up a full one, thereby eliminating the need for a separate trailer staging area and multiple tractor hookup and unhook operations for each trailer movement. Tractor(s) and trailer(s) not in use will not be parked at the PLWTP site. Any offsite parking or staging of vehicles shall be at appropriate sites for this use and shall have proper approvals and zoning.

1.1.5 Power Supply

The Buyer will install and permit a fuel cell on its site to produce its own electricity as part of the process equipment. The remainder of power required for the BUDG will be provided via the PLWTP electrical system at costs and limitations as described in the BUDG Lease. Electricity from the GUF will be made available as follows: The BUDG will be the GUF's third priority customer with the PLWTP priority one and the PLWTP's Master Purchase and Sales Agreement with SDG&E as priority two.

Buyer shall connect to the PLWTP electrical system on the feeder that supplies power center 9. The associated connections, interfaces, relays, electrical designs and safety

systems shall meet SDG&E's Rule 21 interconnection requirements. The design will also address the safety issues are a result that the fuel cell will be generating power on the PLWTP Grid and certain power centers or breakers could be back fed. The Buyer shall provide a utility grade, billing quality approved electric meter that will show imports and exports to and from the Buyer.

1.1.6 Air Pollution Control Systems Description

The Buyer is solely responsible for the air pollution permits, associated offsets, and any modifications to existing equipment that are required to meet the SDAPCD requirements at all times and under all flow conditions for the activities and processes associated with the BUDG.

1.1.7 Services Provided by the PLWTP

Unless specified in this SOW or related document, the Buyer is responsible for providing and purchasing all services required for their facility and personnel including but not limited to electrical, telecommunications, water, wastewater, trash disposal, restrooms, break rooms, weather protection, communications, work space, etc. The Buyer may use the existing trailer's sewer line to dispose of liquids meeting their industrial waste discharge permit requirements if the Buyer agrees to maintain the associated lift station near power station 9. The financial arrangements between the Buyer and Seller relative to these utilities and services are described in the BUDG Lease.

1.2 INTERFACE WITH PLWTP FACILITY OPERATIONS

The PLWTP is currently in operation and large construction projects are ongoing and planned for the future. The Buyer shall cooperate fully with the PLWTP plant staff and the Seller's Construction Manager. Interruptions to the WWTP operations will not be tolerated without written advance notice and approval. Any outages of equipment or processes that will affect the WWTP will be scheduled one week in advance. Coordination with construction projects will be required.

SECTION 2 SELLER'S MANAGEMENT SUPPORT

2.0 INTRODUCTION

The Buyer shall provide management and technical support to the Seller for the planning, approval, acceptance and monitoring of the BUDG project by attending meetings as requested by the Seller, coordinating the attendance of team members, and providing support material as required. Coordination responsibilities shall consist of, but not be limited to:

- Planning, Permitting, Design, Construction Management and facility startup
- Equal Employment Opportunity Program-Voluntary Commitment Program
- Project Scheduling
- Coordination with the Seller's projects at PLWTP

Coordination With Other Projects

The projects listed below will be co-located with, or adjacent to, this privatization project. The Buyer may be required to coordinate design, construction, and startup activities with the following anticipated projects:

- Grit (GIP)
- Digester cleaning

2.1 SCHEDULE

For the purpose of contract requirements, the parties have established the following milestones for the Project.

The Buyer will provide for the Seller's review and approval a final schedule 10 days after the Notice to Proceed (NTP). The performance of the tasks associated with any one or more of these milestones can be moved in time with the mutual agreement of the parties, with the exception of the end of the Preconstruction period.

	Notice to Proceed	. <i></i>
•	Submit Project Schedule	10
	Submit 30% Design	
=	Seller('s) Comment Resolution Meeting	67
	Submit 100% Project Design	120
	Preconstruction period ends	120
=	Seller('s) Comment Resolution Meeting	134
-	Submit Final Project Design for Plan Check and SELLER('S) Back check	135
	Notice to Proceed for Project Construction	165
	Project Startup begins	300
	Complete Construction of Project	330
	Complete Initial Acceptance Testing	360

_	CCC721 Preliminary Operation/Maintenance Notice to Proceed	365
-	Final Acceptance Testing	
_ E	Operation/Maintenance Notice to Proceed	

2.2 PROJECT KICKOFF, PARTNERING, PROGRESS MEETINGS AND REPORTS

Approximately 5 days after the NTP, the Buyer, its lead design engineers, and project managers will attend a 3 hour partnering session followed by a 2 hour kick off meeting.

At the start of design and at least once a month during the design phase, the Buyer shall attend a scheduled 1 ½ hour meeting with the Engineering and Program Management Division, O&M Division and other interested parties to discuss technical and planning issues.

Meeting topics will include:

- Safety Issues
- Design issues and concepts
- Project status
- Schedule
- Technical Issues
- Permits
- Deliverable status
- Submitted deliverables
- Scheduled deliverables
- Project issues and recommended solutions
- Coordination with other Seller 's projects.

During construction there will be weekly, on-site meetings to discuss the issues above and 4 week and 1 week look ahead schedules.

SECTION 3 NOT USED

SECTION 4 ENVIRONMENTAL DOCUMENTS

To comply with the City of San Diego's requirement that a site-specific Environmental Document (ED) be prepared and certified by City Council prior to Council's approval of the construction of the BUDG, a site-specific ED will be prepared by the Seller. The environmental impacts and technical data will be supplied and/or confirmed by the Buyer. The Buyer shall provide all technical information and drawings necessary to prepare the ED's in a timely manner. The remaining planning requirements, excluding community outreach, but including responding to questions or concerns during the project design, permitting and the construction, start-up and operation of the Facility will be the responsibility of the Buyer. The Buyer shall comply with the ED.

SECTION 5 DESIGN AND OPERATIONS CRITERIA AND DESIGN INVESTIGATIONS

5.0 DESIGN AND OPERATIONS CRITERIA

This section sets forth the criteria under which the plant will be designed and operated. The Buyer will be solely responsible for all and any permits, including operational permits, and any and all regulatory compliance, as well as the requirements discussed in this SOW, unless specified otherwise in the Agreement, the Lease or this SOW.

5.0.1 Planning and Permitting

The Buyer shall be responsible for all planning and permitting requirements, unless specified otherwise in the Agreement, the Lease or this SOW. The Seller will be responsible for presenting the project to local planning groups for an approval and other interested community groups. The Buyer is responsible for any modifications or changes that are the result of the BUDG process or resulting permits as further described in the Agreement, the Lease or this SOW. The Buyer's responsibility will include but not be limited to the following:

5.0.1.1 Air Quality

With respect to air quality, the Buyer is responsible for the following:

- Obtaining and paying for any air pollution offsets necessary to permit the BUDG project;
- Obtaining required APCD permits and/or Title V permits for the BUDG process;..

- Maintaining and operating the BUDG facility and its relationship with PLWTP flares in compliance with all APCD requirements;
- Not affecting the PLWTP air permit in a negative manner and being responsible for any necessary changes to any PLWTP permits or equipment resulting from installation, operation and/or maintenance of the BUDG facility.
- Seller shall be responsible for the operation and maintenance of Seller's flares and control systems.

The Buyer shall be responsible for complying with local, state, and Federal regulations pertaining to air pollution, including toxicants.

If requested by the Seller, the Buyer shall provide the Seller with emissions data from the Facility.

5.0.1.2 Gas Emissions

The Buyer will be responsible to design gas emission systems, whether new or existing, to comply with all APCD and Title V requirements. All the gas emissions, and gas wasting systems and gas flaring systems associated with the BUDG and the PLWTP gas supply and gas wasting systems shall work automatically and seamlessly with the PLWTP process controls. The Seller remains responsible for all existing PLWTP gas emissions, gas wasting systems and gas flaring systems operations and controls not specifically associated with the BUDG facility operations or the modifications made for the BUDG facility.

Disposal of high carbon dioxide mixtures shall be done via a flare. Any use or interface with Seller's equipment will be addressed in detail for the Seller's considerations. Any PLWTP flare system DCS modifications shall be approved by the Seller and fallback to existing controls systems, and shall be made by the Seller and paid for by the Buyer. Seller shall ensure that modification made are adequate to protect the PLWTP waste gas controls.

5.0.1.3 Health and Safety

The Buyer shall be responsible for being informed and complying with any local, state, and federal health and safety regulations. Health and Safety plans and Job Safety Analysis (JSAs) (Project Safety Reviews) for the construction and initial operation of the Facility shall be submitted to the Seller for coordination and approval.

5.0.1.4 Hazardous Materials and Wastes

The Buyer shall be informed and adhere to all federal, state, and local laws, regulations, and rules that pertain to hazardous materials and hazardous wastes. This includes, but is not limited to all building codes, Fire Department regulations, County Health Department regulations, Clean Air Act Title III, Federal Executive Order 12856, and MWWD Industrial Waste Discharge permit requirements.

5.0.1.5 Navy / Cabrillo National Monument, Bureau of Land Management, Fort Rosecrans National Cemetery Point Loma Naval Station and Coast Guard Coordination

The PLWTP site is in on land leased from the Bureau of Land Management and is adjacent to the Cabrillo National Monument and the Navy's Point Loma Submarine Base and other government facilities.

The Buyer will need to be cognizant of and comply with all restrictions and existing permits including, but not limited to, lighting, odor control, height, etc. The Seller will use its best effort to inform the Buyer of any restrictions. The Buyer will be invited to participate in the areas "Good Neighbors" meetings to facilitate positive coordination with these facilities. If required by the Bureau of Land Management, the Seller agrees to cooperate with the Buyer to secure a Special Use Permit ("SUP") to allow Buyer to utilize the roadways in the Cabrillo National Monument to transport the purified biogas product away from the BUDG site.

5.0.1.6 Environmental Issues

The Buyer shall be responsible for complying with all federal, state, and local environmental laws and requirements, including but not limited to, Cal EPA, U.W. EPA, NEPA, California Coastal Commission requirements and San Diego Air Pollution Control District (SDAPCD).

5.0.1.6.1 CAL ARP and CAL OSHA

The Buyer will be responsible for compliance and all associated costs with California Accidental Release Prevention Program (CAL-ARP) compliance, 19 CCR Division 2 sections 2735 through 2785 CAL-OSHA compliance, 8 CCR for fuel gases as well as Division 4 section 5189, Process Safety Management of Acutely Hazardous Materials, 40 CFR Part 68 (Federal ARP) and 24 CFR section 1910, 119 Federal OSHA PSM, etc. for the new

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and existing systems as affected by the BUDG project directly or indirectly or as a part of the permitting process.

5.0.2 Site-Specific Environmental Issues

5.0.2.1 Noise Abatement

Engineers experienced in noise abatement design will implement the following noise abatement strategy. The sound requirement for this project is a one hour weighted average sound level of no more than 75dBa measured at the following points:

- Two points in the plant (one at the middle of intersection of Gatchal Road and 3rd Street adjacent to the site and the second at the center of Gatchal Road at the north end of the site);
- One at the National Cemetery; and
- One at one of the Cabrillo National Monument overlooks.

A background noise level will be checked by WEO and POT inspection. The Buyer will determine the background noise levels at the points indicated before and after the installation.

The Buyer will use noise abatement devices and will insulate the compressor enclosures for sound attenuation, if necessary. Sound readings will be confirmed during the acceptance test.

5.0.3 Use of On Site Resources

All utilities and Seller supplied resources supplied by the PLWTP will be paid for as stipulated in the BUDG Lease.

5.0.4 Process Design and Utilities

5.0.4.1 Utilities

Utility cost arrangements are discussed in the BUDG Lease.

5.0.4.1.1 Water Effluent Streams

Buyer may return sewage digester gas and fuel cell condensate and other waste water flows that comply with Buyer's industrial waste discharge permit to the PLWTP sewer system. Storm water is to be collected and discharged to the PLWTP's existing Storm Water Collection system which discharges to the ocean. Proposed locations, quantities and qualities shall be provided with the 30% design submittal. If the sewer lift station in the area of PC-9 is not used by Buyer, a new lift station will be required, unless other arrangements are made in the Lease and/or approved prior to the finial 30% Design Resolution. Whichever lift station option is selected, lift station maintenance will be assumed by the Buyer.

5.0.4.1.2 Telecommunications

Seller will cooperate with Buyer to establish dedicated telecommunications to Buyer's Plant.

5.0.4.1.3 Water Supply

Seller will provide Buyer access to a Seller potable water supply for Buyer's Plant. Seller will provide Buyer access to an industrial water supply for Buyer's Plant which may also be used for fire protection. Buyer will provide proposed location of connections and quantities required with the 30% design submittal.

5.0.4.1.4 Natural Gas Supply

Seller will allow the installation of a natural gas supply line from SDG&E's utility supply point (to be determined by SDG&E) to the Buyer's Site.

5.0.4.1.5 Controls interface

Buyer is to design and be responsible for all controls, installation and startup except those required to be performed by the Seller's DCS controls group. Those services provided by the Seller's DCS Controls group will be provided at the Seller's costs and paid for by the Buyer.

I/C data, loop diagrams, SAMA logic and Modbus registers submitted by the Buyer will meet the Sellers CWP Guideline submittal requirements. See section 6.0 for more details.

Seamless sequencing of the flare and digester gas system and their operations in general are critical to this project and the WWTP.

Buyer will design and install controls and connection points and signals and Seller will provide access, as necessary to allow coordinated operation of both Seller's and Buyer's facilities safely, smoothly and without interruption or any effects to the WWTP. Buyer will design Buyer's system to provide for controls to revert to normal operation of Seller's WWTP in the event of Buyer's system malfunction.

Seller shall identify which panel to connect the fiber optic conduit. Buyer shall provide all communication equipment necessary to communicate with the Seller's control system. Buyer shall provide a complete I/O list including alarm priorities. Buyer will follow chapter D6 of the MWWD (Seller's) design guidelines.

- a. Analog points shall contain ranges, engineering units, and high and low alarm set points.
- b. Set and reset information shall be provided for discrete signals.
- c. Point Descriptions are limited up to thirty characters.

Buyer shall provide detail control strategies per chapter D6 of MWWD (Seller's) design guidelines for Seller to review.

If a data link is required, the Buyer's control system shall support Modbus slave protocol for communicating with the Seller's Control System.

5.0.4.2. Parallel Operation on Electrical System

The new power generation equipment must operate in parallel with the PLWTP and SDG&E's electrical systems. Its electrical interface must conform with SDG&E's requirements for parallel operation and Rule 21. It must be able to synchronize, connect and disconnect from the PLWTP grid automatically with no interruption to the PLWTP electrical service.

The Buyer is responsible for any additional upgrades the PLWTP electric gear, for the system's safe parallel operation.

5.0.4.3 Electric Power

Seller will provide a connection at the 4.16 kw, 3 phase with a minimum capacity of 550 kw. Connection shall be at the underground line in Gatchall Road running adjacent to the site. The Buyer shall provide all electrical systems, protective relays, electric motors, including any necessary modifications to the existing systems to make their concept work without interruption to the PLWTP electrical system. Transfers of the loads to and from the PLWTP grid shall not cause interruptions of the PLWTP or its processes.

5.0.4.3.1 Electrical Conduit

Ridgid metal electrical conduit running above ground is to be coated, unless specific applications are approved prior to the 30% finial design resolution meeting.

5.0.4.4 Architectural and Landscaping Issues

Visual and sound attenuating barriers constructed as a part of this project shall conform to the architectural and landscaping concept for the PLWTP. The Buyer shall coordinate all of its facilities and visible equipment with the existing site architectural and landscaping theme.

5.0.4.5 Excavation and Retaining Wall

All excavations and retaining walls required for construction of the Buyer's facilities shall be located and the work performed so as to not adversely impact any structure, pavement, or utilities adjoining the privatized facilities.

All excess excavation material shall be removed from the site. Excavated material suitable and needed for backfill may be stored near the site in an area designated by the Seller.

5.0.4.6 Horizontal Site Limits

Attachment A1 indicates the site that can be allocated for the privatized facility. The land is to be leased to the Buyer by the Seller. All components of the Buyer's project with the exception of the truck loading manifold are to be located within the specified leased areas with the exception of the extension of utilities to their points of connection which will be done via easments.

5.0.4.7 Underground Conditions

Detailed geotechnical studies have not been prepared for the proposed areas facility. The Geotechnical Reports for the PLWTP and Digester 8 are available for reference in the Seller's library and will be made available by Seller.

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The information presented in these reports is for information only. The Buyer shall conduct any necessary separate geotechnical investigations to support their final design. See Section 5.1.

5.0.4.7.1 Underground Gas Pipe

Soils at the PLWTP can be acid. Underground gas piping is to be 316 SS with concrete slurry to protect if from the soil conditions. While the PLWTP Senior Civil Engineer may consider deviations prior to the finial 30% design resolution, this will be a strict requirement in and around Third Street and off the Buyer's Lease

5.0.4.8 Chemicals

The Buyer shall provide all the chemicals necessary for Buyer's process. Any affects such chemicals have on the PLWTP's permits, safety plans or business plan shall be the responsibility of the Buyer.

5.0.4.9 Metering, Data, DCS Connections

Billing quality (Utility grade) metering shall be provided on all utilities, feedstock, and services provided from and to the PLWTP. If a utility grade meter is not available, alternative meters will be selected and agreed to by both parties. Flow and accumulative flows will be provided to the PLWTP from all such meters. Date will be supplied to the PLWTP via modbus link (ie RS 432 port). The data link(s) shall be a fiber optic line in conduit. The data links will be defined via the CWP Guidelines register identification term. Modifications to the PLWTP will be performed by Seller and paid for by the Buyer. The only control that PLWTP anticipates needing is a BUDG emergency shut down button.

5.0.5 Use of the Seller's Clean Water Program (CWP) Guidelines

Clean Water Guidelines

The CWP Guidelines will apply unless otherwise directed to all work potentially left behind at the end of the lease. This includes all connections to PLWTP systems, all underground systems to the point of convenient disconnection above grade, concrete slabs, etc. The purpose of the CWP Guidelines is to present preferred design approaches and criteria for use in designing facilities. The guidelines are intended to provide some uniformity in key concepts, processes, equipment types, and construction materials or facilities built for the Seller. The design guidelines are not intended to limit the responsibility of the Buyer to design professionally sound, efficient and workable facilities. Not all aspects of design are addressed in these guidelines. In areas which are not addressed, the Buyer should use good engineering judgment and proven practices. Deviation from the Guidelines for the areas discussed above, during the term of the Agreement, shall be approved by the PLWTP Senior Civil Engineer.

5.0.5.1 Seller require strict adherence to the CWP Guidelines CADD and Controls standards as partially defined in this SOW. See Sections 5.0.4.1.5 and 6.1.3 for more details.

5.1 ADDITIONAL INVESTIGATIONS

Information provided and/or requested under this section represents investigations that are either required, or may be necessary for the Buyer to complete its design and construction.

5.1.1 Geotechnical Investigations

Geotechnical investigations have been performed as a part of the design of the PLWTP facilities. A copy of the final geotechnical report may be purchased from the Seller by contacting the Project Manager. Recent grading activities may have occurred at these sites. If additional information is necessary, the Buyer shall perform such additional investigations, as required. The Buyer shall perform any seismic evaluations or soil boring as required to support the structural design.

5.1.2 Surveying

The Seller shall provide a survey of the Facility site lease boundary. The Buyer shall review this survey information to determine if additional site surveying will be necessary to establish necessary controls for the design and construction of this project. If soil borings are needed, survey control for geotechnical borings will be provided by the Buyer.

SECTION 6 DESIGN DEVELOPMENT

6.1 DESIGN

All engineering design drawings shall be signed and stamped by a registered professional engineer practicing in the specialty. Other registrations may be required by the State or the City's Development Services Department.

6.1.1 Thirty Percent Design Submittal

The 30% design submittal shall be sufficient for the Seller to evaluate the Buyer's Site Layout, Equipment Layout, site grading design, as well as the new equipment package's visual exposure from the Cabrillo National Monument, the Ocean, the entrance road and the Administration Buildings main entrance. Major equipment shall be selected at the 30% design level. Site elevation views will be provided and will be adequate for preliminary architectural reviews. Drawings of the location and size of all points of

connection to all PLWTP systems will be provided. Piping and conduits routing outside the leased or licensed sites shall be shown. Gas flare design, selection and controls will be provided as part of the 30% design. Within seven (7) days of receipt of the 30% design the Seller shall hold a table top review meeting with the Buyer and resilient reviewers. Notes of this meeting with official comments on the 30% design will be issued via e-mail within seven (7) days of this meeting.

6.1.2 One Hundred Percent Design Submittal

The one hundred percent design is expected to be the Buyer's proposed 100% design except for incorporation of the Seller's review comments prior to submission for building permits. The Buyer will incorporate the Seller's agreed to 100% design comments into the 100% design before submission for building permits. Shop drawings for points of connection to all PLWTP systems will be provided. Exterior plan views and elevations for all major equipment will also be provided. Gas disposal systems specifications and detail submittals including controls, logic diagrams and sequence of operations shall be provided at this design level.

6.1.3 Design Submittal Deliverables & Additional Design Requirements

Buyer will provide appropriately developed (30% or 100%) drawings, specifications and/or equipment data sheets for all major equipment for review by the Seller. This level of detail will not apply to process equipment located on the BUDG Lease site unless specifically required by the Seller for safety and design reasons, with the exceptions of the flares, truck loading header, filling system, associated connection system and the H2S removal bed system.

- Specifications. The deliverables of this task shall be provided as ten (10) hard copies of each specification section. Equipment data sheets or shop drawings may be provided in lieu of equipment specifications as appropriate.
- Drawings. Drawing size will be 11" x 17". Drawings related to WWTP site modifications that are outside the leased or licensed sites will be prepared in the Micro Station format meeting Seller's Guidelines.

6.1.3.1 Civil/Site/Structural

The Buyer will provide Seller with the following:

- Overall site plan showing all utilities outside the leased sites and location of interfaces with all Seller utilities, site boundaries, site entrances, packaged units and associated equipment
- Details of interfaces with any Seller utilities.
- Roads, driveways, and equipment pads

- Design for site storm water management
- Site earth work and retaining walls design and sections.

6.1.3.2. Landscaping And Architectural

A landscaping Plan shall be developed in accordance with the PLWTP Landscaping Theme. It will show types of plant and sprinkler systems. Crushed rock or gravel will be the minimum acceptable non-pavement finish for the flat areas of the project.

Buyer will provide Seller with elevations of the site looking east and north including equipment cross sections, and site lighting.

6.1.3.3 Mechanical

Buyer will provide Seller with the following:

- Mechanical equipment layout with interconnecting piping
- Packaged units outside general dimensions, and connection points. (May be manufacture's drawings and data sheets)
- Process diagrams of all major processes.

6.1.3.4 Electrical

Buyer will provide Seller with the following:

Electrical Site Plan

NFPA AND CALOSHA electrical hazard classes clearly indicated for all areas. The Digester Cleaning areas and its operations cannot be affected by NFPA or CALOSHA or other electrical hazard class restrictions or any other hazard restrictions when the cleaning operations are ongoing.

- One Line Diagrams
- All protection and paralleling details as per SDG&E requirements. Any necessary interface with and/or modifications to the existing plant switch gear.
- Plan Showing Location of new and existing Switch Gear and MCCs and required PLWTP connections.

- Power monitoring concepts and location of kWh meter(s)
- Facility elevations showing elevations of switch gear and MCCs (may be manufacture's drawings and data sheets)
- PVC coated rigid metal conduit will be required for above ground applications
- DCS control interface information control logic changer and I/O data for: flare control modifications, emergency stops, general alarm warning to the PLWTP operator, all motor data required by the Seller, and electrical satellites and major breaker status.

6.1.3.5 Digester Gas

Buyer will provide Seller with the following:

- Layout of underground pipes, connections to PLWTP's system, and the Buyer's equipment
- Condensate collection and disposal systems and proposed connections to PLWTP
- New flare system design, location and elevation
- Digester gas filter systems and filter maintenance systems, as appropriate.
- Wastewater disposal
- Gas disposal (flare) systems (the Buyer's flare located in the space provided for in the lease, in the area just southwest of the flares).
- A valved and capped connection on the BUDG site so the pressure swing adsorption unit's reject and back flush gases maybe returned to the WWTP at sometime in the future, if both parties decide this is beneficial.
- Gas metering details (the gas meter with which the Buyer will use to pay the Seller will meter all digester gas that the Buyer requires and takes for the Buyer process with the exception of digester gas the Buyer uses to maintain stable flare operations in the Buyer's gas disposal (flare) system).

6.2 SAFETY

6.2.1 Safety and Emergency Plan

The Buyer shall prepare and submit a "Safety Plan" describing the various safety elements of the facility construction and its operation. The Buyer shall include a narrative describing any previous incidents involving "safety issues" that have occurred in similar facilities operated by Buyer. The "Safety Plan" should describe the following:

- a. The Companies Safety Policy
- b. Safety engineering measures including but not limited to the following:
 - 1. Equipment safety features and ergonomic design;
 - 2. Odor and noise control
 - 3. Fire and explosion prevention and control features:
 - 4. Adequate enclosure ventilation; and
 - 5. Required personal protective equipment.
 - 6. Trucking procedures
 - 7. Gas transfer procedures
 - 8. Gas storage systems
 - 9. Filter maintenance procedures
- c. Definition of responsibilities and identification of a safety chain of command
- d. Identification of how the safety plan meets all local, state, and federal safety regulations

If a particular risk is present (i.e., fire or explosion potential), methods to provide a safe environment shall be described. The plan would be incorporated as a part of the facility O&M manual. The Buyer shall provide the Seller with Job Safety Analysis (JSA) (Project Safety Review) and comply with the Seller's Safety Requirements during construction of this Facility.

6.3 DESIGN AND COMMENT RESOLUTION MEETINGS

Once the Seller's comments on the 100% design submittal are received, the Buyer shall plan to attend one 2 hour comment resolution meeting. This meeting shall discuss the Facility design submittal and trucking procedures. Attendees shall include at least the project manager and project engineer to resolve issues raised. Buyers and the Sellers shall mutually resolve all Seller's comments prior to subsequent submittals.

SECTION 7 FINAL DESIGN

7.0 FINAL DESIGN PREPARATION

Final design shall include preparation and submittal of construction drawings and specifications, draft Safety Manual, draft Operation and Maintenance Manual, permits, Equal Opportunity Compliance, insurance documents and other required submittals information for the Seller's review and approval.

The Buyer will provide standard drawings and details as appropriate and discussed in Section 5.0.5.1 in an electronic media format (Microstation) in accordance with the CWP Guidelines.

. All written submittals shall be in hard copy and shall also be provided on MSWord files.

7.1 FINAL DESIGN SUBMITTAL

Prior to submission for plan check, the Seller's will perform a back check review of the final design submittal for conformance with agreed to 100% review comments. If required by the Seller, the Buyer shall resubmit revised drawings and Specifications prior to submission for plan check.

The Buyer shall incorporate the City's Development Services Department's plan check comments and the Seller's comments into the approved plans for construction and submit five (5) sets to the Seller with on original plan check etc.

DELIVERABLES

- Construction drawings, specifications shop drawings (as appropriate) and equipment data sheets (15 copies each)
- Copies of all required permits, licenses and approvals to start construction, as defined by the Seller. (2 copies)
- All construction information required for evaluation of Equal Employment Opportunity Compliance efforts. (2 copies)
- Insurance documentation
- Draft Facility start up protocol
- Draft Facility Test protocol
- Draft Safety Manual (5 copies)
- Initial JSAs (Project Safety Reviews)
- Emergency Response Plan (5 copies) (PLWTP Business Plan Amendments)
- Draft invoicing systems and format.

- Draft Memorandum Of Understanding (MOU) for the operational procedures and Contract interpretation, with provisions for annual site and system inspections by Seller and regularly scheduled meetings between Seller and Buyer to discuss site logistics and other project related issues.
- Draft Operations and Maintenance Manual (5 copies). See Section 8.
- Specifications shall be provided on Word files. Database shall be provided as one hard copy and also on electronic media
- Request for necessary appurtenant easements for utilities to serve Buyer owned facilities with suggested easements delineated. Final surveys will be confirmed by Seller.

SECTION 8 PREPARE OPERATIONS AND MAINTENANCE MANUALS

8.1 OPERATIONS MANUAL

The Buyer shall prepare an operations manual for the Seller's review and approval. It is to include the process description, control and the safety sections including all figures and tables. Additionally, the Operation Manual shall include the following:

- a. Description of any policies and procedures specific to the facility, updated as needed, and made available at the facility for regulatory inspection. It should include any and all information that enables supervisory and operating personnel to determine sequence of operations, routine maintenance schedules, plans, policies, and legal requirements that must be adhered to.
- b. Operation of new facility equipment shall conform to manufacturer/vendor specifications. These specifications are to be included in the Operation's Manual.
- c. The substantially complete draft of this manual will be submitted as part of the Final Design Package.
- d. A facility-specific operator's Training Manual shall be developed for approval as part of the final design and made available to each employee.
- e. A facility specific truck driver's Training Manual.

0007.38 Truck movement schedule and procedures to modify the transport/delivery schedule.

8.2 OPERATIONS PLAN

The Buyer shall prepare an Operations Plan for the expanded facility containing the following information:

- a. designation of persons responsible for operation, control, and maintenance of facility;
- b. methods to minimize, manage, and monitor odors, noise and air emissions
- c. litter control measures;
- d. contingency operations plan (in the event of equipment failure, power outages, natural disasters, fire)
- e. Standard operating procedures for coordinating with the PLWTP and its staff.
- f. Truck drivers' standard operating procedure.

SECTION 9 DESIGN REVIEWS AND APPROVALS

9.1 SELLER'S REVIEW

Design products shall be submitted to Seller for review. Seller will collect review comments, will resolve internal review conflicts, and will provide one (1) hard copy and one (1) electronic copy of all review comments. Seller's review comments will be summarized in standard text with a space provided for the Buyer's responses regarding action taken on the review comment. The Buyer shall provide their written responses to comments before the scheduled comment resolution meeting. The Buyer and Seller shall resolve review comments and the Buyer shall incorporate accepted review comments. Seller shall provide minutes of all comment resolution meetings to document agreements made during the meeting. These will be submitted in comment table format documenting agreed-upon actions in the Buyer's response column.

SECTION 10 PLANNING AND PERMITS

10.0 PLANNING AND PERMITS

The Buyer shall obtain all required permits, unless otherwise specified in the Agreement, the Lease and this SOW. The Buyer is responsible for supporting the Seller's Planning Process including presenting information in person to meetings of interested parties and presenting to community planning groups to obtain their approvals.

10.1 PERMIT APPLICATIONS AND TECHNICAL BACK-UP

The Buyer shall prepare, apply for, pay permitting fees for and obtain all permits and approvals unless otherwise specified in the Agreement, the Lease and this SOW.

Buyer shall develop plans and information which will be used for the planning design, permitting, construction, and operations of the facility. These plans may include an Air Quality Control Plan, Noise Abatement Plan, Hazardous Material Management Plan, and Risk Management and Prevention Plan, as required.

A revised Hazardous Materials Management Plan may be necessary and is to be prepared consistent with the NFPA, California Titles 8 and 22, the UBC and the California Health and Safety Code, Federal Executive Order 12856 and shall be coordinated with the requirements of a Risk Management and Prevention Plan required by Chapter 6.95 of the California Health and Safety Code. As requested by the Seller's Project Manager and described in this SOW, all plans and permits shall be submitted to the Seller's Project Manager for the Seller's review prior to submitting them directly to the appropriate agencies. Plans and permits submitted to the Seller's Project Manager will be reviewed and comments returned to the Buyer within three (3) complete working days after receipt.

Special attention should be given to the Storm Water control permit requirements.

10.2 COORDINATION AND AGENCY INTERFACE

The Buyer shall conduct discussions and interface with any agencies necessary to complete this project, and shall follow any application submittals progress. Agencies include, but are not limited to: San Diego Coastal Commission, San Diego Air Pollution Control District, San Diego Gas and Electric and the California Independent System Operation. (if additional onsite electrical generation is to be provided).

SECTION 11 CONSTRUCTION, START-UP AND OPERATIONS

11.0 CONSTRUCTION COORDINATION

Upon receipt of the Seller's CNTP, the Buyer may implement construction contracts and begin construction. The Buyer shall coordinate with the onsite Seller's Construction Manager. The

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Buyer shall attend weekly job site meetings as requested by the Seller or Site Construction Manager and coordinate attendance by the other team members or subcontractors, as required.

Coordination responsibilities shall consist of:

- Following procedures and work plans established at the site.
- Coordination with other Buyers and projects at the site
- Keeping up-to-date record documents
- Project meetings
- Site visits
- Those discussed in the General Requirements (Attachment A2)
- Obtaining and complying with all permits

11.1 CONSTRUCTION

Prior to the start of construction, all design drawings, permits and Equal Employment Opportunity guidelines and insurance documents must be approved by the Seller. Upon the Seller's issuance of a CNTP, the construction can begin.

11.1.1 State and Local License Requirements

Buyer or Buyer's general contractor shall be a Class "A" contractor certified in the State of California, and meet all necessary State and local license requirements.

11.1.2 General Requirements

See Attachment A2 for additional and specific construction related requirements

11.2 INTERFACE WITH OTHER AGENCIES

As required, the Buyer will meet with regulatory agencies, utility companies, PLWTP and other City departments to complete construction services during the construction and start-up phases. The Seller shall be informed and invited to participate with agency contacts where important project issues may be discussed.

SECTION 12 ATTEND CONSTRUCTION MEETINGS

12.1 PRECONSTRUCTION MEETINGS

The Buyer is to provide attendance of appropriate design and construction team members to respond to the Seller's Construction Manager's questions for a two hour meeting. The agenda shall include site access, final schedule, coordination with PLWTP, and other related issues.

12.2 SAFETY MEETING

Prior to the start of construction, the Buyer's site construction personnel shall attend the Seller's standard construction Safety Program orientation training.

12.3 CONSTRUCTION COORDINATION MEETING

Plan and attend a weekly meeting to coordinate construction of the Facility with the work of the PLWTP operations and maintenance staff and other contractors on the site and to provide the Seller's staff will regular status updates. Meeting agenda will include:

Safety

Schedule Status

Four week look ahead schedule

Status of required submittals

Expected deliveries

Status of JSAs

Status of planned outages

Review of As-Built drawings

SECTION 13 INSPECTIONS

13.1 PROJECT REPRESENTATION

The Buyer should have at least one (1) project representative on site to implement the Buyer's construction QA/QC and safety program. The Buyer will provide the Seller's Construction Manager with a copy of all inspection test results, as needed, to verify conformance with overall site quality requirements. In addition, the Buyer shall have at least one (1) onsite person designated as the person in charge of construction management who is to be present during construction activities. The duties of the project representative will include review of work progress for conformance with contract documents, attending coordination meetings with the Seller's Construction Manager and coordinating work with other Seller's projects which interface with the Buyer's work.

SECTION 14 PREPARATION OF RECORD DRAWING/REPORTS

14.1 SAFETY

The Buyer shall provide Seller's Construction Manager with Job Safety Analysis (JSAs)(Project Safety Reviews) as required by the Seller's procedures.

14.2 AS-BUILT DRAWINGS

All as-built drawings for appropriate points of connection, rights of way and equipment to remain will be supplied to the Seller in the format discussed in Section 6.0. Revisions to the submitted design drawings will be incorporated, based on as-built conditions on a weekly basis.

The as-built design deliverables shall be submitted prior to final acceptance as one updated reproducible mylar each and also on electronic media in accordance with the Section 6.0.

SECTION 15 PLANT START-UP AND ACCEPTANCE

15.0 PLANT START-UP AND ACCEPTANCE

The Buyer shall conduct startup and acceptance activities in coordination with the Seller to ensure that the new Facility is functioning properly prior to operation with the existing PLWTP and to meet all acceptance criteria for the processing of the digester gas from the PLWTP, as well as the criteria established by the Seller for interconnecting with required PLWTP utilities and the proper operation and control of all utilities, digester gas systems and waste gas flares.

15.1 GENERAL CONDITIONS – STARTUP AND ACCEPTANCE

15.1.1 Intent

The startup and acceptance testing is intended to ascertain whether the BUDG facility has met the Acceptance Standards and performance requirements without interference to the PLWTP operations and maintenance and to insure compliance with the APSB, Site Lease and SOW requirements. The Buyer shall operate the Facility to demonstrate the BUDG Facility performance in relationship to those conditions stipulated in the contract documents and this SOW and compliance with all permit conditions and regulations.

Tests will be conducted to demonstrate that the Facility meets:

- PLWTP Operational Requirements
- PLWTP Traffic Control Requirements
- Gas wasting operations for the PLWTP
- Electrical system operations
- Environmental conditions and Permits
- PLWTP Digester Gas System Operations

15.1.2 Definitions

15.1.2.1 Startup

Startup means the period of operations commencing with the first energizing of any new or additional equipment in the BUDG Facility, proceeding through sequential startup of each unit of equipment in accordance with the startup Protocol (to be determined by Buyer and approved by Seller (approval shall not be unreasonably withheld), and in keeping with good plant operating practice), and culminating with the acceptance tests as outlined below.

15.1.2.2 Initial Acceptance Tests

Initial acceptance testing encompasses the operation of the BUDG Facility to demonstrate it's ability to perform all intended functions, including proper and seamless integrated operation with the PLWTP facility, apart from the long-term demonstration of commercial operations.

15.1.2.3 Final Acceptance Tests

Final Acceptance testing consists of demonstrating the continued performance of the BUDG and associated operations over an extended period of time, under normal commercial operating conditions which will include normal variations in the quantity of digester gas available, variations in the ability of the BUDG to utilize the gas available, and without disruption to the operation of the PLWTP.

15.1.3 Requirements and Prior Conditions

The Buyer shall furnish all labor, supervision, equipment, instrumentation, and special services necessary to conduct the Startup and Acceptance tests. Additionally, the Buyer shall be solely responsible for all costs it incurs in undertaking the Startup and Acceptance Tests.

The Buyer shall coordinate Startup activities and Acceptance Testing with the Seller and the existing WWTP to assure that these activities do not adversely impact ongoing Seller's operations.

The Buyer is responsible for having adequate instrumentation to perform all tests required.

All Acceptance Tests shall be performed in accordance with the applicable local, State, and Federal regulatory agencies' rules, regulations, and methods, and any requirements of pertinent Sections of this Agreement.

At least thirty (30) days prior to the commencement of any Acceptance Tests to determine the ability of the Facility to satisfy the Acceptance Standards, the Seller shall be given notice in the form of a preliminary Acceptance Test Protocol, which will incorporate the guidelines established in this section and the Seller's pervious comments. It will contain the Buyer's best estimate of the schedule and procedures of the Acceptance Tests. The Seller's shall provide comments within ten (10) days to the Buyer regarding the preliminary Acceptance Test Protocol. A final Acceptance Test Protocol acceptable to both the Seller and the Buyer must be issued five (5) working days prior to the start of any Acceptance Tests. The Buyer shall notify the Seller at least five (5) working days prior to the start of any Acceptance Test described herein.

During the Acceptance Test period, all equipment, including that associated with air pollution control, normal and temporary loadout, control systems, gas collection, storage, compression, transportation and conditioning systems, if any, will operate at its various operating modes at design capacity to demonstrate the BUDG Facility will not have any significant negative operational, financial or maintenance impacts on the PLWTP. During the Acceptance Tests, the Buyer shall operate in conformance with SDAPCD requirements. The Acceptance Test will be conducted with all the utilities allowed operating as designed and per this Agreement and SOW. Test procedures may be required to occur concurrently, as directed by the Seller.

All metering devices requiring field calibration shall be calibrated immediately prior to the start of testing, in accordance with normal practices. At the end of the Acceptance Tests, the metering devices shall be recalibrated to determine if there was any change in accuracy. Sealed instruments that have been factory calibrated will not need calibration if within calibration dates. During start-up and shakedown operation of the BUDG Facility and before conducting the Acceptance Tests, any instrumentation and controls requiring field calibrations will be calibrated by technicians provided by the Buyer, its subcontractors, or suppliers. The Seller will be notified of and given the opportunity to witness the calibration of any instruments or control loops calibrated on site.

The Buyer shall communicate with the Seller on an on-going basis during the conduct of the tests regarding the nature and occurrence of all events and activities taking place. The Seller may witness any or all parts of the Acceptance Tests.

The Buyer shall maintain a record of all calibration checks and make such records available to the Seller, upon request.

15.2 STARTUP

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The BUDG Facility will complete a start-up demonstration period during which the Facility will have been operated on Digester gas at or above 70 percent capacity to demonstrate mechanical completion of the BUDG Facility and to allow any required adjustments.

The Startup protocol (see 15.1.2.1) will include any Seller's comments in relationship to effects the startup may have on the PLWTP.

Prior to the start of Acceptance Testing, the Buyer shall complete the following:

15.2.1 Mechanical Completion

Comply with all provisions of the Agreement relating to the installation of equipment, components and systems necessary for the safe and stable operation of the appropriate system being tested (except for the completion of painting, final grading, and any other portion of the work not affecting the operability, safety, or mechanical or electrical integrity of the BUDG facility in accordance with the final plans and specifications).

0 0 7 4 6 15.2.2 Operational Readiness

Verify that all equipment and systems are substantially and materially complete and ready for initial operation and may be operated in the manner in which they are normally intended to be operated without damage to any property and without injury to any person. Verification will include the completion of integrity tests such as hydrostatic and pneumatic pressure tests, high pot tests, insulation resistance and continuity test, calibration, clean-outs and flushes, and completed system start-up testing in accordance with approved procedures.

15.2.3 Punch List

Prepare a comprehensive punch list of all remaining work to be performed by both the Buyer and the Seller. The punch list shall identify the party responsible and a schedule to perform each task. The initiation of performance testing and achievement of the BUDG Facility acceptance shall not require completing of the punch list tasks, except to the extent that it will not relieve the Buyer of its obligation to complete such tasks.

15.2.4 Capacity Demonstration

Demonstrate that the BUDG process train will accept and process digester gas at 70% of design capacity for a 4 hour period.

15.2.5 Utility Performance

Demonstrate the proper operation of the Electrical System switchgear, safety interlocks (including EMO initiated by PLWTP), software modifications to the PLWTP's DCS for flare control, and other utility systems.

15.2.6 Truck Movement Test

Demonstrate that tube trailers can be readily and safely positioned at both normal and temporary Trailer Loading Facility.

15.2.7 Truck Loading Test

Demonstrate the successful loading of a tube trailer with BUDG product gas at both normal and temporary loadout facilities.

Having demonstrated and complied with the criteria and requirements stated above to the satisfaction of the Seller, the Buyer may begin Acceptance Testing.

15.3 INITIAL ACCEPTANCE TEST

If any extraordinary adjustments or modifications, with the exception of normal maintenance and adjustment, are performed after the start-up period, the Seller may request start of Acceptance Tests to begin again.

The Buyer shall maintain records of the quantity and type of chemicals(s) used by the BUDG Facility for testing purposes. In addition, the Buyer shall maintain records of the hourly operation, including uptime, hourly thru put of the system, quantity of compressed Digester Gas and any waste products generated during each of the Acceptance Tests.

During the Initial Acceptance Tests, no unusual or special maintenance or operating procedures will be permitted other than normal activities typically required for normal operation.

The initial Acceptance Tests will be composed of the following individual tests, concurrently when possible:

15.3.1 Extended Run Test

Operation of the BUDG facility for five (5) consecutive days (Monday thru Friday) including Transport operations to remove product gas from the site. The BUDG shall maintain capacity as product demand and digester gas supply allow. Processing operations (but not transportation operations) shall be under automatic control throughout, with supervision performed by the permanent plant operating personnel. The Buyer may augment the permanent personnel with qualified staff to achieve continuous supervision.

During the full duration of the Extended Run Test, the BUDG Facility will be required to receive only digester gas.

During the full duration of the Extended Run Test, the BUDG Facility will be required to consume and receive the expected chemical and associated shipments.

During the full duration of the Extended Run Test, the Facility will be required to operate utilizing power generated by its fuel cell at maximum available capacity, 95% of the time.

Gas deliveries to the BUDG shall be determined by permanent in-plant instrumentation. The digester gas delivery rate shall be determined from values recorded by the Point of Delivery Flow Meter.

The gas processing rate shall be determined by permanent BUDG instrumentation which will measure the flow, temperature, and pressure of all digester gas. An on-line gas chromatograph shall be used to measure the methane content of the gas.

During the Extended Run Test period, the BUDG unit must maintain the highest reasonable operating capacity for sustainable stable operation under the existing PLWTP operating conditions and the existing gas loadout conditions including the ability to

transport the gas for at least 110 hours of the 120 hour test period. Average operating capacity for the duration of the test shall be greater than 50% of the maximum rated capacity established during the test. Downtime for scheduled maintenance of the PLWTP systems, other than digester gas related, shall not affect the duration of the test.

No unusual or special maintenance or operating procedures will be permitted other than normal activities typically required for normal full load operations.

15.3.2 Maximum Capacity (throughput) test

The BUDG Facility shall be tested at maximum design throughput for a period of not less than four (4) hours continuous. Seller shall cooperate to achieve a test window wherein the digester gas availability will be at or above appx. 1.6 MMSCFD continuous flow rate equivalent. The Net compressed digester gas Capacity of the BUDG shall be determined by permanent BUDG instrumentation with preference given to instruments that incorporate totalizers. Net electrical consumption shall be measured by a billing grade kilowatt-hour meter.

15.3.3 Emissions and Flare Test

Emissions shall be monitored from all sources and the flare of the BUDG and PLWTP will be tested per ADCD requirements and additionally per Seller's requirements in all BUDG operational modes to ensure correct and proper operation of all systems and the proper and intended operation of all automatic and manual control systems.

15.3.4 Noise Emission Test

Noise Emission Test will be conducted during the Extended Run Test and the Maximum Capacity Test to confirm compliance with the Seller's requirements (75 dBA at the facility property line).

Noise Emission Tests shall be performed at night at receptors identified in the Acceptance Test Protocol, at the entrance road to the plant adjacent to the BUDG site, the operations Building, and at four (4) points located at the PLWTP property line selected by the Seller.

15.3.5 Truck Movement Test

This test shall be performed for 48 hours at each of the loadout facilities and with the system in full operation. It shall demonstrate that the truck traffic associated with the BUDG and Staging comply with the PLWTP Traffic Control plan for this project and do not significant impact the PLWTP. Safe Loading of trucks will also be demonstrated. No odors or gas releases shall be detected at any lease hold boundary.

15.3.6 Initial Acceptance Test Report

After Completion of the Initial Acceptance Tests, and certification by the Seller and the Buyer, an Acceptance Tests report shall be prepared by the Buyer(s) and within 30 calendar days of such certification; three (3) copies shall be submitted to the Seller. This report shall contain, but not be limited to, the following information and certifications:

- Copies of all data and log sheets, as provided for in the Acceptance Test Protocol.
- Copies of all laboratory analyses.
- Copies of results of any and all tests performed during the Acceptance Tests.
- All necessary certificates relating to calibrations, testing, evaluation, analysis, and performance required pursuant to the Acceptance Test Protocol.
- A summary of test results supported by calculations demonstrating the ability to meet the requirements relating to the Extended Run, Maximum Capacity, Emissions Tests, and other tests required.
- A certification signed by an officer of the Buyer stating that: the Initial Acceptance Tests were conducted in accordance with the Acceptance Test. Protocol; the requirements of the Initial Acceptance Tests were satisfied or the extent to which they were not satisfied; and the Initial Acceptance Tests demonstrated the BUDG Facility met the Acceptance Standard.

15.3.7 Acceptance Standard

In the event that it is determined that the BUDG Facility has not passed the Acceptance Tests as performed, then, in any retesting of the Facility, all individual test activities, with respect to such Acceptance Test, will be performed or, as arrangements are made in advance with the Seller. Retesting for Extended Run performance or Environmental Compliance may be conducted separately, but must be in accordance with the respective protocols for that test.

After successful completion and Certification of the results of the Initial Acceptance Tests, the Seller shall issue a Conditional Notice to Operate the BUDG Facility for commercial operations. This milestone is intended to signal the start of the Contract period for gas delivery, subject to the 15 month limitation after Contract Approval and Notice to Proceed from the Seller.

15.4 FINAL ACCEPTANCE

Final Acceptance shall be achieved when:

• The Punch List is closed out satisfactorily to both Seller and Buyer; and

• Within a ninety (90) day period after the Conditional Notice To Operate, normal BUDG operations have been achieved on a continuous and consistent basis. This shall be demonstrated by recording a thirty (30) day period with BUDG uptime in excess of 95%, no upset conditions affecting PLWTP operations, environmental permit conditions being met, and continuous deliveries of BUDG product gas to the fuel cell sites.

The Buyer shall, within five (5) days of the end of the 30 day period, issue a report detailing all unusual operating events during the 30 day period, and make available all operating data, including gas flow rates and totals, flare interactions, environmental measurements, and other operational data available and of interest to the Seller.

Upon concurrence by the Seller that the 30 day operational period has been successfully demonstrated, the Seller shall issue a Final Notice of Acceptance and Notice to Operate the BUDG Facility to the Buyer.

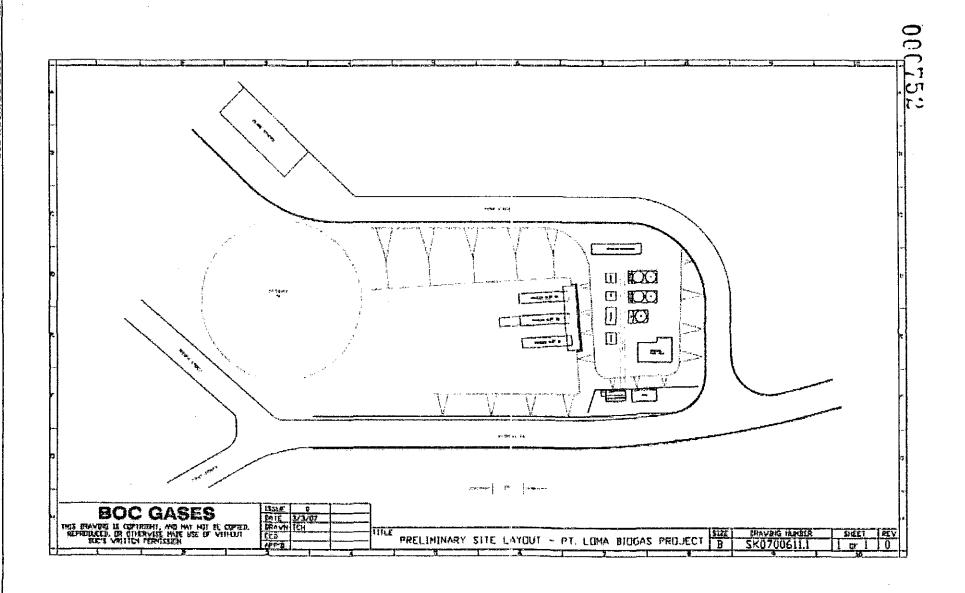
Attachment A1:

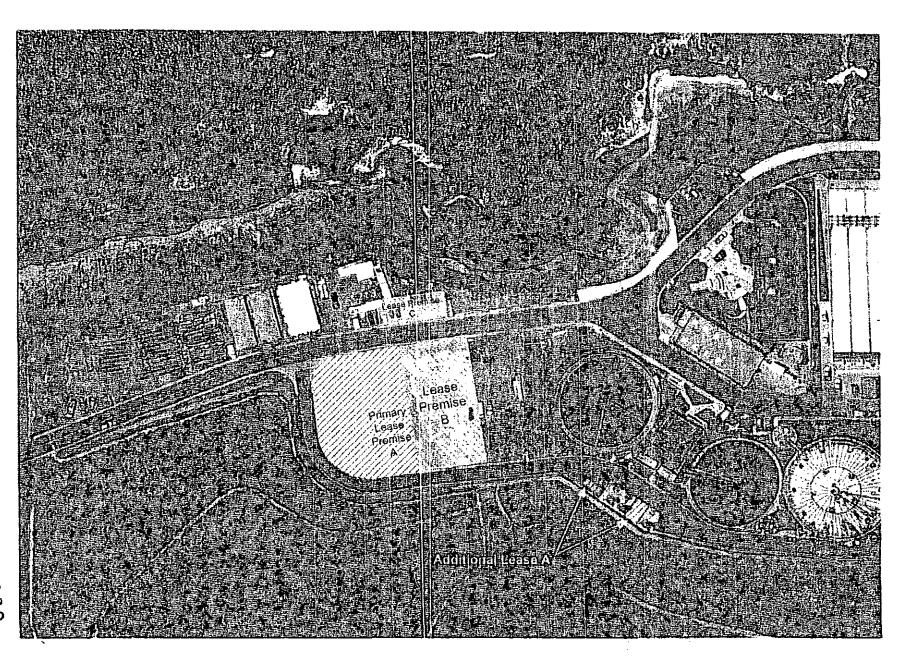
Site Plan

and

Reference Drawings

Reference drawings that were provided during the selection process will be retransmitted prior to the NTP





Attachment A2

General Requirements

GENERAL PROJECT REQUIREMENTS

<u>SECTION</u>	TITLE	PAGE(S)
01010	Summary of Work	1-2
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01090	Reference Standards	
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01530	Protection of Existing Facilities	13-2
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01600	Products, Materials, Equipment, and Substitutions	17-3
01660	Facility Start-up	18-4
01680	Physical Checkout: Shop, Field & Functional Testing.	19-9
01700	Project Closeout	20-5

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 GENERAL

A. The WORK to be performed under this Contract shall consist of furnishing all plant, tools, equipment, materials, supplies, and manufactured articles and furnishing all labor, transportation and services, including fuel and essential communications, and performing all work, or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents. The WORK shall be complete, and all work, materials, and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper design and construction of the WORK in good faith shall be provided by the BUYER as though originally so indicated, at no increase in cost to the SELLER. The SELLER may delegate its responsibilities to a management firm to assist with its duties.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

A. General

The Scope of Work (SOW), Supplementary General Conditions, and the Design/Build Agreement take precedence over this document.

1.3 WORK BY OTHERS

A. Interference With Work On Utilities: The BUYER shall cooperate fully with all utility forces of the SELLER or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interfere with the progress of the WORK, and shall schedule the WORK so as to minimize interference with said relocation, altering, or other rearranging of facilities.

1.4 SPECIFIC COORDINATION AND MILESTONE REQUIREMENTS

A. Coordination Requirements

The BUYER shall coordinate the WORK of this Contract with the continued operation of the WWTP. Coordination activities include, but are not limited to, the scheduling of work at interface locations to permit normal Wastewater facility operations except as approved in advance by the Seller.

1.5 DEFINITIONS APPLICABLE TO TECHNICAL SPECIFICATIONS

A. The following words have the meaning defined in the Technical Portions of the WORK:

Indicated - is a word used to direct the BUYER to information contained on the drawings or in the Specifications. Terms such as "shown," "noted," "scheduled," and "specified" also may be used to assist in locating information but no limitation of location is implied or intended.

Furnish - means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and start-up.

Install - defines operations at the site including assembly, erection, placing, anchoring, applying, shaping to dimension, finishing, curing, protecting, and cleaning, ready for the SELLER's use.

Provide - is defined as furnish and install, ready for the intended use.

Installer - a person or firm engaged by the BUYER or any sub BUYER for the performance of installation, erection, or application work at the site. Installers must be expert in the operations they are engaged to perform.

** END OF SECTION **

SECTION 01039 - COORDINATION AND MEETINGS

PART 1 - GENERAL

1.1 GENERAL

A. In addition to coordination requirements, this section includes information on the preconstruction meeting, the site mobilization meeting, progress meetings, and preinstallation meetings.

1.2 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the SOW, Design Drawings and Specifications to assure an efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Coordinate completion and clean up of work of separate sections in preparation for Substantial Completion and for portions of work designated for SELLER'S partial utilization.

1.3 PRECONSTRUCTION MEETING

- A. Prior to the commencement of work at the site, a preconstruction conference will be held at a mutually agreed time and place. The BUYER'S Project, its superintendent, and subcontractor as the BUYER deems appropriate shall attend the preconstruction conference. Other attendees may be:
 - 1. OWNER
 - 2. Representative of the OWNER.
 - 3. Governmental representatives as appropriate.
 - 4. DESIGN CONSULTANT(S)

- 5. Others as requested by the SELLER, or CITY.
- B. Unless previously submitted to the SELLER, the BUYER shall bring to the conference information requested with the notification of the time and place of the preconstruction conference.
- C. The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to the BUYER prior to the meeting date. However, the BUYER should be prepared to discuss all of the items listed below.
 - 1. Status of BUYER's insurance and bonds.
 - 2. BUYER's tentative schedules.
 - 3. Transmittal, review, and distribution of BUYER's submittals.
 - 4. Processing applications for payment.
 - 5. Maintaining record documents.
 - 6. Critical work sequencing.
 - 7. Field decisions and Change Orders.
 - 8. Use of project site, office and storage areas, security, housekeeping, and SELLER's needs.
 - 9. Major equipment deliveries and priorities.
 - 10. BUYER's assignments for safety and first aid.
- D. The SELLER will preside at the preconstruction conference and will arrange for recording and distributing the minutes in written form to all persons in attendance.

1.4 SITE MOBILIZATION MEETING

- A. The SELLER will schedule a meeting at the Project site prior to BUYER occupancy.
- B. Attendance Required: SELLER, BUYER, Superintendent, and major Subcontractors.
- C. Agenda:
 - 1. Use of premises by SELLER and BUYER.
 - 2. SELLER'S requirements and partial occupancy if applicable.

- 3. Construction facilities and controls provided by SELLER.
- 4. Temporary utilities provided by SELLER.
- 5. Building layout.
- 6. Security and housekeeping procedures.
- 7. Schedules.
- 8. Procedures for testing.
- 9. Procedures for maintaining record documents.
- 10. Requirements for start-up of equipment.
- 11. Inspection and acceptance of equipment put into service during construction period.
- D. The SELLER will record minutes and distribute copies to all participants.

1.5 PROGRESS MEETINGS

- A. The SELLER shall schedule and hold regular on-site progress meetings biweekly and at other times as required by progress of the WORK. The BUYER shall attend, and may also bring representatives of its suppliers, manufacturers, and subBUYERs.
- B. The SELLER shall preside at the meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings will be to review the progress of the WORK, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the BUYER is required to present any issues which may impact his work, with a view to resolve these issues expeditiously.

1.6 PRE-INSTALLATION MEETING

- A. When required in individual specification sections, The SELLER will convene a preinstallation meeting at the work site prior to commencing work of the section.
- B. Attendance will be required of parties directly affecting, or affected by, work of the specific section. Failure of the BUYER, subcontractor, or Supplier to attend may result in a charge to the BUYER for costs incurred by the SELLER, in attending the meeting.

- C. The SELLER will prepare an agenda and preside at the meeting:
 - 1. Review conditions of installation, preparation and installation procedures.

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- 2. Review coordination with related work.
- D. The SELLER will record the minutes and distribute copies to the SELLER, BUYER, and other participants.

1.7 MEANS & METHODS MEETINGS

A. From time to time the BUYER shall, as necessary to justify changes in the schedule, or as requested, present to the SELLER and the SELLER a revised oral presentation.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

** END OF SECTION **

SECTION 01045 - CUTTING AND PATCHING (Off Leased Site Only)

PART 1 - GENERAL

1.1 DEFINITION

"Cutting-and-Patching" is defined to include the cutting and patching of nominally completed and previously existing concrete, steel, wood, and miscellaneous metal structures; piping; and pavement in order to accommodate the coordination of the WORK, or the installation of other facilities or structures or to uncover other facilities and structures for access or inspection, or to obtain samples for testing, or for similar purposes.

1.2 REQUIREMENTS OF STRUCTURAL WORK

- A. Structural work shall not be cut in a manner that may result in a reduction of 10ad-carrying capacity or load/deflection ratio.
- B. Prior to cutting-and-patching the following categories of work, the BUYER shall obtain the SELLER'S approval to proceed:
 - 1. Miscellaneous structural metals, including equipment supports, stair systems and similar categories of work
 - 2. Structural concrete
 - 3. Bearing and retaining walls
 - 4. Structural decking
 - 5. Exterior curtain wall construction

1.3 OPERATIONAL AND SAFETY LIMITATIONS

- A. The BUYER shall not cut or patch operational elements and safety-related components in a manner that may result in a reduction of capacities to perform in the manner intended or result in decreased operational life, increased maintenance, or decreased safety.
- B. Prior to cutting-and-patching the following categories of work, the BUYER shall obtain the SELLER'S approval to proceed:
 - 1. Operating systems and equipment

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- 2. Water, moisture, vapor, air, smoke barriers, membranes, and flashings
- 3. Control, communication, conveying, and a electrical wiring systems

1.4 VISUAL REQUIREMENTS

The BUYER shall not cut or patch work which is exposed on the exterior or exposed in occupied spaces, in a manner that may result in a reduction of visual qualities or resulting in substantial evidence of the cut-and-patch work, both as judged solely by the SELLER. The BUYER shall remove and replace work judged by the SELLER to have been cut or patched in a visually unsatisfactory manner.

1.5 APPROVALS

- A. Where prior approval of cutting-and-patching is required, the BUYER shall submit the request well in advance of time work will be performed. The request should include a description of why cutting-and-patching cannot reasonably be avoided, how it will be performed, how structural elements (if any) will be reinforced, products to be used, firms and tradesmen to perform the work, approximate dates of the work, and anticipated results in terms of structural, operational, and visual variations from the original WORK.
- B. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.
- C. Where cutting-and-patching involves addition of reinforcement to structural elements, submit details and engineering calculations to show how reinforcement is integrated with the original structure.
- D. Approval by the SELLER to proceed with the cutting-and-patching does not waive the SELLER'S right to later require complete removal and replacement of a part of the WORK found to be not in accordance with the Contract Documents or industry standards.

PART 2 - PRODUCTS

2.1 MATERIALS USED IN CUTTING-AND-PATCHING

A. The BUYER shall use material identical with the original materials where feasible. If identical materials are not available, the BUYER shall provide materials for cutting-and-patching which will result in equal-or-better work than the work being cut-and-patched, in terms of performance characteristics and visual effects where applicable.

B. Materials shall comply with the requirements of the technical specifications wherever applicable.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Before cutting existing surfaces, the BUYER shall examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. The BUYER shall take corrective action before proceeding, if unsafe or unsatisfactory conditions, as determined by the SELLER, are encountered.
- B. Before proceeding, the BUYER shall meet at the site with all subcontractors involved in cutting and patching, the SELLER, and any BUYERs or subcontractors. Areas of potential interference and conflict shall other effected be reviewed and procedures to resolve potential conflicts shall be determined.

3.2. PREPARATION

- A. Provide temporary support of work to be cut.
- B. Protect existing work during cutting-and-patching to prevent damage.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork that must remain in service. Do not remove or relocate until provisions have been made to bypass them.
- E. Take precaution necessary to prevent fires and to prevent the false activation of fire alarms.

3.3 PERFORMANCE

- A. Employ skilled workmen to perform cutting-and-patching. Proceed with cutting-and-patching at the earliest feasible time and complete without delay.
- B. Cut existing work to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.
- C. Cut existing work using methods least likely to damage elements to be retained or adjoining construction. Where possible, review proposed procedures with the

- original installer; comply with the original installer's recommendations. Review asbuilt or record drawings if available.
- D. In general, where cutting is required, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
- E. To avoid marring existing finished surfaces, cut, or drill from the exposed or finished side into concealed surfaces.
- F. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.
- G. Comply with requirements of applicable Sections of Division 2 where cutting and patching requires excavating and backfilling.
- H. Bypass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after bypassing and cutting.
- I. Patch with durable seams that are as invisible as possible. Comply with tolerances as specified in these Contract Documents.
- J. Where feasible, inspect and test patch areas to demonstrate integrity of the installation.
 - K. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in manner that will minimize evidence of patching and refinishing.
 - 1. Where removal of walls or partitions extends from one finished area into another, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary to achieve uniform color and appearance.
- M. At penetration of fire rated walls, ceilings, or floors, completely seal voids with suitable fire rated material to full thickness of the penetrated element.

3.4 CLEANING

A. Thoroughly clean areas and spaces where cutting-and-patching is performed or used as access. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering to its original condition.

** END OF SECTION **

SECTION 01050 - FIELD ENGINEERING

PART 1 - GENERAL

1.1 QUALITY CONTROL

- 3. The BUYER is required to:
 - 1. Employ a professional engineer of the discipline required for specific service on the project, registered in the State of California.
 - 2. Submit evidence of Engineer's Errors and Omissions insurance coverage in the form of an insurance certificate.

1.2 SURVEY REFERENCE POINTS - NOT USED

1.3 PROJECT MASTER RECORD DOCUMENTS

A. The BUYER is required to:

- 1. Maintain a complete and accurate log of control and survey work as it progresses.
- 2. The BUYER shall keep and maintain, at the job site, one record set of Contract Specifications and Drawings. The BUYER shall mark all project conditions, locations, configurations, and any other changes or deviations which may vary from the details represented on the original Contract Documents, including concealed construction and utility features which are revealed during the course of construction. Record Documents shall be supplemented by any detailed sketches or photographs as necessary or directed to indicate, fully, the WORK as actually constructed. These Master Record Documents of the BUYER's representation of as-built conditions, including all revisions made necessary by Requests for Information, Addenda, Field Orders, approved Submittals, properly verified test reports, and Change Orders shall be maintained up-to-date during the progress of the WORK, and shall be made available for review and comment by the SELLER at the monthly review meeting (reference 01025, 3.1.A)
- 3. On the specifications legibly mark and record at each Product Section a description of the actual Products installed, including the following:
 - Manufacturer's name, address, telephone number, product model, and serial number.
 - Product substitutions or alternates utilized.
 - Changes made by Addenda, Requests for Information, Clarifications, Field

Orders, or Change Orders.

- 4. Legibly mark Record Drawings and shop drawings to record actual construction including:
 - Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the WORK.
 - Field changes of dimension and detail.
 - Details not on original or incorrectly depicted on Contract Drawings.
- 5. In the case of those drawings which depict the detail requirement for equipment to be assembled and wired in the factory, such as motor control centers and the like, the Record Documents shall be updated by indicating those portions which are superseded by change order drawings or final shop drawings, and by including appropriate reference information describing the change orders by number and the shop drawings by manufacturer, drawing, and revision numbers.
- 6. Make Record Documents accessible to the SELLER at all times during the construction period.
- B. The SELLER shall review the BUYER's updated Record Documents on a monthly basis as a prerequisite for recommending approval of the BUYER's monthly progress payment. Failure of the BUYER to maintain updated Record Documents shall result in delaying the BUYER's monthly progress payment until such Record Documents are properly updated.
- C. Upon substantial completion of the WORK and prior to final acceptance, the BUYER shall finalize and deliver a complete set of Master Record Documents to the SELLER for transmittal to the SELLER, conforming to the construction records of the BUYER. This set of Master Record Documents shall consist of corrected specifications showing any revisions and corrected full sized drawings showing the reported location of the WORK. Said up-to-date Master Record Documents shall be in the form of a set of full sized prints and specifications with legibly plotted information overlaid in red. The information submitted by the BUYER in the Master Record Documents will be assumed to be correct, and the BUYER shall be responsible for the accuracy of such information, and for any errors or omissions which may appear on the Master Record Documents as a result.
- D. Final payment or Release of Retention will not be acted upon until the BUYER-prepared Master Record Documents have been delivered to the SELLER.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify locations of control points prior to starting work.
- B. Verify horizontal and vertical position of reference points.
- C. Promptly notify the SELLER of any discrepancies discovered prior to proceeding with the work.

END OF SECTION

01090 - REFERENCE STANDARDS

PART 1 - GENERAL

1.1 GENERAL

- A. **Titles of Sections and Paragraphs:** Captions accompanying specification sections and paragraphs are for convenience of reference only, and do not form a part of the Specifications.
- B. Applicable Publications: Whenever in these Specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the WORK is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- C. Specialists, Assignments: In certain instances, specification text requires (or implies) that specific work is to be assigned to specialists or expert entities, who must be engaged for the performance of that work. Such assignments shall be recognized as special requirements over which the BUYER has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of work is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of contract requirements remains with the BUYER.

1.2 REFERENCE SPECIFICATIONS, CODES. AND STANDARDS

- A. Without limiting the generality of other requirements of the Specifications, all work specified herein shall conform to or exceed the requirements of applicable codes and the applicable requirements of the following documents.
- B. References herein to "Building Code" or "Uniform Building Code" shall mean Uniform Building Code of the International Conference of Building Officials (ICBO). Similarly, references to "Mechanical Code" or "Uniform Mechanical Code," "Plumbing Code" or "Uniform Plumbing Code," "Fire Code" or "Uniform Fire Code," shall mean Uniform Mechanical Code, Uniform Plumbing Code and Uniform Fire Code of the International Conference of the Building Officials (ICBO). "Electric Code" or "National Electric Code (NEC)" shall mean the National Electric Code of the

National Fire Protection Association (NFPA). The latest edition of the codes as approved by the Municipal Code and used by the local agency as of the date that the WORK is advertised for bids, as adopted by the agency having jurisdiction, shall apply to the WORK herein, including all addenda, modifications, amendments, or other lawful changes thereto.

- C. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the order of precedence as listed in the General Conditions shall govern. In those cases where a conflict cannot be resolved by utilizing the order of precedence, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the SELLER for clarification and directions prior to ordering or providing any materials or furnishing labor. The BUYER's bid shall reflect the most stringent Contract Document requirements.
- D. The BUYER shall construct the WORK specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- E. Applicable Standard Specifications: References in the Contract Documents to "Standard Specifications" or SSPWC shall mean the Standard Specifications for Public Works Construction, 2000 edition at the time of award, including the 2000 Regional Supplement Amendments and City of San Diego Supplement Amendments.
- F. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- G. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- H. Applicable Safety Standards: References herein to "Cal-OSHA" shall mean State of California, Department of Industrial Relations, Construction Safety Orders, as amended to date, and all changes and amendments thereto.

1.3 QUALITY ASSURANCE

- A. Conform to reference standard by date of issue current on date for receiving bids.
- B. Should the specified reference standards conflict with the Contract Documents, refer to paragraph 1.2 (c) of this Section.

1.4 SCHEDULE OF REFERENCES

ACI American Concrete Institute

Box 19150 Reford Station Detroit, MI 48219

ADC Air Diffusion Council

230 North Michigan Avenue

Chicago, IL 60601

AFBMA Antifriction Bearing Manufacturers Association

1101 Connecticut Avenue N.W. Suite 700

Washington, DC 20036

AMCA Air Movement and Control Association

30 West University Drive Arlington Heights, IL 60004

ANSI American National Standards Institute

1430 Broadway

ιΞ,

New York, NY 10018

ARI Air-Conditioning and Refrigeration Institute

1501 Wilson Boulevard Arlington, VA 22209

ASHRAE American Society of Heating, Refrigerating and

Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329

ASME American Society of Mechanical Engineers

345 East 47th Street New York, NY 10017

ASTM American Society for Testing and Materials

1916 Race Street

Philadelphia, PA 19103

AWS American Welding Society

550 LeJeune Road, N.W.

Miami, FL 33135

ICBO International Conference of Building Officials

5360 S. Workman Mill Road

Whittier, CA 90601

IEEE Institute of Electrical and Electronics Engineers

345 East 47th Street New York, NY 10017

NEC National Electric Code

1 Battery March Park

P.O. Box 9146

Quincy, MA 02169

NEMA National Electrical Manufacturers' Association

2101 'L' Street, N.W. Washington, DC 20037

NFPA National Fire Protection Association

Battery March Park
 Quincy, MA 02269

SMACNA Sheet Metal and Air Conditioning CONTRACTORS

National Association

8224 Old Court House Road

Vienna, VA 22180

UL Underwriters' Laboratories, Inc.

333 Pfingston Road Northbrook, IL 60062

** END OF SECTION **

SECTION 01300 - BUYER SUBMITTALS

PART 1 - GENERAL

1.1 GENERAL

- A. All submittals by the BUYER shall be submitted to the SELLER.
- B. BUYER shall assume all responsibility and cost for changing submittals and/or equipment after their approval by the SELLER.

1.2 SHOP DRAWINGS

- A. Wherever called for in the Contract Documents, the BUYER shall furnish to the SELLER for review eight (8) copies, plus one reproducible copy, of each shop drawing submittal. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication and installation drawings, erection drawings, lists, graphs, catalog sheets, data sheets, and similar items. The BUYER shall submit, the following for all prefabricated or manufactured structural, mechanical, electrical, plumbing, and process systems and equipment:
 - 1. Wiring and control diagrams of systems and equipment.
 - 2. Complete manufacturer's specifications, including materials description and paint system of all equipment supplied.
 - 3. Samples of finish colors for selection.
- 4. Requirements for storage and protection prior to installation.
- 5. Installation procedures.
- 6. List of all requested exceptions to the Contract Documents and/or variations from the specified equipment.
- 7. Structural supports and associated calculation.
 - B. All shop drawing submittals shall be accompanied by the SELLER's standard submittal transmittal form. The form may be obtained in quantity from the SELLER. Any submittal not accompanied by such a form, or where all applicable items on the form are not completed, may be returned for re-submittal.

- 1. Sequentially number the transmittal forms. Re-submittals shall have original number with an alphabetic suffix.
- 2. Identify Contract, BUYER, Subcontractor and/or Supplier; pertinent drawing sheet and detail number(s), and specification section number, as appropriate. On standard drawings or data sheets, clearly indicate model and option being proposed and strike out all non-relevant data.
- 3. All submittals must be capable of being scanned electronically for filing on a computer file.
- C. Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multiple-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the SELLER.
- D. Except as may otherwise be indicated herein, the SELLER will return four (4) prints of each submittal to the BUYER with comments noted thereon, within seven (7) calendar days following their receipt by the SELLER. It is considered reasonable that the BUYER shall make a complete and acceptable submittal to the SELLER by the second submission of a submittal item. The SELLER's and BUYER's maximum review period for each submittal, will be fourteen (14) days per submittal and the BUYER's re-submittal shall be made within seven (7) days. Therefore, for a submittal that requires a second submittal before it is complete, the maximum period for that submittal could be 21 days.
- E. If four (4) copies of a submittal are returned to the BUYER marked "NO EXCEPTIONS TAKEN," formal revision and re-submission of said submittal will not be required.
- F. If four (4) copies of a submittal are returned to the BUYER marked "MAKE CORRECTIONS NOTED," formal revision and re-submission of said submittal will not be required, unless specifically required.
- G. If a submittal is returned to the BUYER marked "REJECTED-RESUBMIT," the BUYER shall revise said submittal and shall resubmit the required number of copies of said revised submittal to the SELLER.
- H. Fabrication of an item shall be commenced only after the SELLER has reviewed the pertinent submittals and the SELLER has returned copies to the BUYER marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

Corrections indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for changes to the contract requirements.

- I. The SELLER's and SELLER'S review of BUYER shop drawing submittals shall not relieve the BUYER of the entire responsibility for the correctness of details and dimensions. The BUYER shall assume all responsibility and risk for any misfits due to any errors in BUYER submittals. The BUYER shall be responsible for the dimensions and the design of adequate connections and details.
- J. The SELLER's may schedule a submittal conference to provide for a rapid review of a submittal, should the project schedule warrant such a review. The SELLER, SELLER, BUYER, and a qualified manufacturer's representative shall attend the submittal conference.

1.3 BUYER'S SCHEDULE

The BUYER's construction schedules and reports shall be prepared and submitted to the SELLER in accordance with the provisions of Section 01310.

1.4 SELLER'S SELLER'S MANUAL

- A. The BUYER shall submit technical operation and maintenance information for each item installed off the leased site of mechanical, electrical and instrumentation equipment in an organized manner in the SELLER'S MANUAL. The SELLER'S MANUAL shall be written so that it can be used and understood by the SELLER'S operation and maintenance staff if the need occurs.
- B. The SELLER'S MANUAL shall be subdivided first by specification section number; second, by equipment item; and last, by "part." "Parts" shall conform to the following (as applicable):

1. Part 1 - Equipment Summary

- a. Summary: A summary table shall indicate the equipment name, equipment number, and process area in which the equipment is installed.
- b. Form: The SELLER will supply an Equipment Summary Form for each item of mechanical, electrical and instrumentation equipment in the WORK. The BUYER shall fill in the relevant information on the form and include it in Part 1.

2. Part 2 - Operational Procedures

a. Procedures: Manufacturer-recommended procedures for the following shall be included in Part 2:

Installation

Adjustment

Start-up

Location of controls, special tools or other equipment required Related instrumentation needed for operation

Operating Procedures

Load Changes

Calibration

Shutdown

Troubleshooting

Disassembly

Reassembly

Realignment

Testing to determine performance efficiency

Tabulation of proper settings for all pressure relief valves, low and high pressure switches and other protection devices.

List of all electrical relay settings including alarm and contact settings

3. Part 3 - Preventive Maintenance Procedures

- a. Procedures: Preventive maintenance procedures shall include all manufacturer-recommended procedures to be performed on a periodic basis, both by removing and replacing the equipment or component and by leaving the equipment in place.
- b. Schedules: Recommended frequency of preventive maintenance procedures shall be included. Lubrication schedules, including lubricant SAE grade and type, and temperature ranges shall be covered.

4. Part 4 - Parts List

- a. Parts List: A complete parts list shall be furnished, including a generic description and manufacturer's identification number for each part. Addresses and telephone numbers of the nearest supplier and parts warehouse shall be included.
- b. Drawings: Cross-sectional or exploded view drawings shall accompany the parts list.

5. Part 5 - Wiring Diagrams

Diagrams: Part 5 shall include complete internal and connection wiring diagrams for electrical equipment items.

6. Part 6 - Shop Drawings

Drawings: This part shall include approved shop or fabrication drawings, complete with dimensions.

7. Part 7- Safety

Procedures: This part describes the safety precautions to be taken when operating and maintaining the equipment or working near it.

8. Part 8 - Documentation

All equipment warranties, affidavits, and certifications required by the Technical Specifications shall be placed in this part.

Bound equipment SELLER'S manuals supplied by the vendor which are in different order may be provided rather than unbinding them to match the order described above.

- C. The BUYER shall furnish to the SELLER seven (7) identical SELLER'S MANUALS. Each set shall consist of one or more volumes, each of which shall be labeled and bound in a standard size, 3-ring, loose leaf, vinyl plastic hard cover binder suitable for bookshelf storage. Binder ring size shall not exceed 2.5 inches. A table of contents indicating all equipment in the manuals shall be prepared.
- D. SELLER'S MANUALS shall be submitted in final form to the SELLER not later than the 75% of construction completion date. All discrepancies found by the SELLER in the SELLER'S MANUALS shall be corrected by the BUYER within 30 days from the date of written notification by the SELLER.
- E. Incomplete or unacceptable SELLER'S MANUALS at the 75% construction completion point shall constitute sufficient justification to withhold the amount stipulated in Section 01700 from any monies due the BUYER.
- F. When available from the equipment vendor, the BUYER shall submit one copy of available sections of the final SELLER'S MANUALS in an electronic media format. The information shall be provided on a 3 2"disk in Word, Word Perfect, or ASCII files.

1.5 SPARE PARTS LIST

The BUYER shall furnish to the SELLER seven (7) copies of spare parts information for all mechanical, electrical, and instrumentation equipment. The spare parts list shall include the current list price of each spare part. The spare parts list shall be limited to those spare parts which each manufacturer recommends be maintained by the SELLER in inventory at the plant site. Each manufacturer or supplier shall indicate the name, address, and telephone number of its nearest outlet of spare parts to facilitate the SELLER in ordering. The BUYER shall cross-reference all spare parts lists to the equipment numbers designated in the Contract Documents. The spare parts lists shall be labeled and bound in standard size, 3-ring, loose leaf, vinyl plastic hard cover binders suitable for bookshelf storage. Binder ring size shall not exceed 2.5 inches.

1.6 SAFETY PLAN

Prior to the performance of any work the BUYER will submit to the SELLER for review and comment two copies of a contract specific Safety/Health and Security Plan signed by an officer of the BUYER's organization. Adequacy is the responsibility of the BUYER. See Section 01520 for the required safety plan content.

1.7 SAFETY PLAN

A. Prior to the performance of any work the BUYER shall provide all submittals required by State and Federal grant applications, regulatory agencies, the Supplemental General Conditions and as may be specifically required in other parts of this Contract. BUYER shall make provision for incorporating all requirements for administrative submittals into subcontracts awarded for the work as part of the agreed price for the work.

SECTION 01309 - SCHEDULE

PART 1 - GENERAL

1.1 REQUIREMENTS OVERVIEW

- A. The BUYER'S planning, scheduling and execution of the contract work shall be presented to the SELLER by submission of the progress schedule information and data.
- B. A Schedule approved by the SELLER shall be the basis of the construction schedule and the BUYER'S payment schedule. Each item will have identified an early start, late start, early finish, and late finish date that will allow the work to be commenced in accordance with the contract SCHEDULED milestones.
- C. The WORK under this contract will be planned, scheduled, executed, and reported by the BUYER using a CPM (Critical Path Method) schedule. The BUYER will adhere to established technical standards for CPM using a computerized precedence diagram method. The schedule files shall be in Primavera Project Planner (P3) format version 1.1 for windows format or higher.
- D. The BUYER is responsible for coordinating its own schedules (including subcontractors) as well as construction activities of others as directed by the SELLER. The SELLER will maintain the overall Project Construction Schedule, of which the BUYER'S Construction Schedule will be a part. The BUYER should refer to the Project Construction Schedule to ensure that project site coordination and work by others at the site properly depicts the BUYER'S planning.
- E. All submittals discussed in this section shall be prepared and handled in accordance with Section 01300 BUYER Submittals.

1.2 QUALITY ASSURANCE

A. In preparing all contract schedules, it is the responsibility of the BUYER to work with each subcontractor and supplier to obtain information pertinent to the planning and updating of their respective activities and schedules.

1.3 GENERAL CRITERIA

- A. The Schedule is prepared by the BUYER and reflects the BUYER'S plans for and status of the WORK.
- B. The Schedule shall show the breakdown of work into activities and relationships only to the extent required to effectively manage the WORK. The Schedule shall show the

division of the WORK into activities and specify the progression from the Notice To Proceed to the end of the Contract Time.

- C. The Scope of the WORK shall be broken down into significant milestones and activities that include the work of all major trade subcontractors and supplier.

 Mobilization activities shall also be identified. Work being performed by MBE/WBE firms shall be identified by a distinguishable coding. Each activity shall have a time duration.
- D. The BUYER'S Schedule shall include all procurement related activities which lead to delivery of permanent materials to the site in a timely manner. The procurement activities shall indicate significant events in the procurement process such as issuance of purchase orders and subcontracts, submittal of shop drawings, review and approval of shop drawings, release for fabrication, release for shipment, etc., as appropriate.
- E. The BUYER shall schedule those requisite duties and responsibilities of the SELLER, the SELLER and others (performing work for the SELLER) indicated in or required by the Contract Documents within the Contract Time. The Schedule shall incorporate activities and sequences based on the information given in the Contract Documents, and if not given, as indicated by the SELLER in writing.

SECTION 01400 - QUALITY CONTROL

PART 1 - GENERAL

1.1 DEFINITION

A. Specific quality control requirements for the WORK are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the WORK beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.

1.2 PROJECT QUALITY CONTROL PLAN

- A. The BUYER is responsible for producing WORK to meet the quality required by the contract documents and to perform the quality control efforts necessary to ensure those requirements are met. The SELLER's inspection of any WORK will not relieve the BUYER of the primary responsibility for such efforts.
- B. The BUYER will be obligated to accommodate procedural changes to contract required quality control issues requested by the SELLER.

1.3 SAMPLING AND TESTING

- A. Unless otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, or as applicable to the class and nature of the article or materials considered; however, the SELLER reserves the right to use any generally-accepted system of sampling and testing which, in the opinion of the SELLER will insure the SELLER that the quality of the workmanship is in full accord with the Contract Documents. Test procedures, reporting, recording and recording methods shall be provided to the Seller for review thirty (30) calendar days prior to any official testing. The Seller shall provide any comments on the proposed procedures, etc., within fifteen (15) calendar days.
- B. Any waiver by the SELLER of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial work, shall not be construed as a waiver of any requirements of the Contract Documents.

C. Notwithstanding the existence of such waiver, the SELLER reserves the right to make independent investigations and tests, and failure of any portion of the WORK to meet any of the requirements of the Contract Documents, shall be reasonable cause for the SELLER to require the removal or correction and reconstruction of any such work in accordance with the General Conditions.

PART 2 - EXECUTION

2.1 INSTALLATION

- A. Inspection: The BUYER shall inspect materials or equipment upon arrival on the job site and immediately prior to installation. The BUYER shall reject damaged and defective items. This inspection shall include a review of Contract requirements; a check to assure that all materials and/or equipment have been tested, submitted, and approved; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials and equipment to assure that they conform to reviewed shop drawings or submittal data. This inspection shall also include instruction as necessary to assure that workmen know the requirements of the Contract as they pertain to the feature, an examination of the quality of workmanship, as well as a review of control testing for compliance with the Contract requirements.
- B. **Measurements:** The BUYER shall verify measurements and dimensions of the WORK, as an integral step of starting each installation.
- 1. **Special Procedures:** Methods and facilities shall be provided to assure conformance with requirements for special process specifications such as welding, heat treating and nondestructive testing of materials. Certifications for personnel, procedures, and equipment shall be maintained as required to meet the requirement of the Contract Documents and all applicable codes.
- D. **Manufacturer's Instructions:** Where installations include manufactured products, the BUYER shall comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in Contract Documents.

3.2 MANUFACTURER'S FIELD INSTALLATION SERVICES AND REPORTS

- A. When specified in individual specification sections, the BUYER shall require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, (test, adjust, and balance of equipment) and to provide instructions when necessary.
- B. The BUYER shall report to the SELLER in writing any observations and site decisions or instructions given by the manufacturer's representative to the BUYER that are supplemental or contrary to manufacturers' written instructions.

C. The BUYER shall submit manufacturer representative's reports (in duplicate within 10 days of each field visit, to the SELLER for review. If duration of field visit is greater than one week, submit weekly reports. The final report shall certify that equipment or system has been satisfactorily installed and is functioning correctly.

SECTION 01505 - MOBILIZATION

PART 1 - GENERAL

1.1 GENERAL

- A. Mobilization shall include the moving onto the site of all personnel and equipment; implementing security requirements; and as approved in advance by the Seller; furnishing and erecting temporary buildings and other construction facilities; and all as required for the proper performance and completion of the WORK.

 Mobilization shall include but not be limited to the following principal items:
 - 1. Moving on to the site of all BUYER'S personnel and equipment required for construction operations.
 - 2. Constructing and implementing security features and requirements in compliance with the Contract Documents.
 - 3. Obtaining all required permits.
 - 4. Having all OSHA required notices and establishment of safety programs.
 - 5. Submitting initial submittals.

At the SELLER'S discretion it may also include the following items:

- 1. Installing temporary construction power, wiring, and lighting facilities.
- 2. Providing all on-site communication facilities.
- 3. Providing on-site sanitary facilities and potable water facilities for PVI BUYER personnel if needed.

1.2 CONSTRUCTION FACILITIES PLAN

- A. Prior to commencement of any field work, the BUYER shall submit a Construction Facilities Plan to SELLER for approval. Said plan shall show the layout, equipment, materials and procedures that BUYER proposes for construction of temporary electrical, lighting, water, and sanitation, as required.
- B. The BUYER'S construction facilities shall be a temporary nature. The BUYER shall be wholly responsible for the security its laydown area, and for all its plant, materials, equipment, and tools at all times.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01510 - TEMPORARY UTILITIES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. The BUYER shall make arrangements with the appropriate utility agencies for any required temporary connections to the utilities. The BUYER is responsible for extending any utility services to the required point of use.
- B. Type Of Services: The types of utility services required for general temporary use at the project site, may include but are not limited to the following:

Potable water Sanitary facilities

C. Scheduled Uses: The BUYER shall schedule the implementation and termination of service for each temporary utility or facility.

PART 2 - PRODUCTS

2.1 MATERIALS

8. The BUYER shall provide either new or used materials and equipment, which are in substantially undamaged condition and without significant deterioration and which are recognized in the construction industry, by compliance with appropriate standards, as being suitable for intended use in each case. Where a portion of a temporary utility is provided for the BUYER by a utility company, the BUYER shall provide the remainder with matching and compatible materials and equipment and shall comply with recommendations of the utility company.

PART 3 - EXECUTION

3.1 INSTALLATION OF TEMPORARY UTILITY SERVICES

A. General: Wherever feasible, the BUYER shall engage the utility company to install temporary service to the project, or as a minimum, to make connection to existing utility service; shall locate services where they will not interfere with total project construction work, including installation of permanent utility services; shall maintain temporary services as installed for required period of use; and shall relocate, modify or extend as necessary from time to time during that period as required to accommodate total project construction work.

3.2 ELECTRICAL SERVICE

- 1. BUYER Operations: The BUYER shall pay all costs for electrical system installation.
- 2. SELLER will provide a connection in power center a adequate to supply the Buyer 480v, 3 phase power rated at 50 kw.
- Approval of Electrical Connections: All temporary connections for electricity shall be subject to approval of the SELLER and the power company representative, and shall be removed in like manner at the BUYER'S expense prior to final acceptance of the WORK.
- 4. Separation of Circuits: Unless otherwise permitted by the SELLER, circuits separate from lighting circuits shall be used for all power purposes.
- 5. Construction Wiring: All wiring for temporary electric light and power shall be properly installed and maintained and shall be securely fastened in place. All electrical facilities shall conform to the requirements of Title 8, Industrial Relations, Subchapter 5, Electrical Safety Orders, California Administrative Code; and Subpart K of the OSHA Safety and Health Standards for Construction.

3.3 INSTALLATION OF POWER DISTRIBUTION SYSTEM

- A. Temporary Power Distribution: If required, the BUYER shall provide a weatherproof, grounded, temporary power distribution system sufficient to accommodate performance of entire WORK of the Contract, including but not necessarily limited to temporary electrical heating where indicated; operation of test equipment and test operation of building equipment and systems which cannot be delayed until permanent power connections are operable; temporary operation of other temporary facilities, including permanent equipment and systems which must be placed in operation prior to use of permanent power connections; and power for temporary operation of existing facilities (if any) at the site during change-over to new permanent power system. Provide circuits of adequate size and proper power characteristics for each use; run circuit wiring generally overhead, and rise vertically in locations where it will be least exposed to possible damage from construction operations, and result in least interference with performance of the WORK; provide rigid steel conduit or equivalent raceways for wiring which must be exposed on grade, floors, decks, or other recognized exposures to damage or abuse.
- B. Provide power outlets for BUYER'S operations, with transformers, branch wiring and distribution boxes located safely and conveniently for the proposed construction activities. Provide flexible power cords as required.
- C. Maintain main service disconnect and over current protection at source distribution equipment.

3.4 INSTALLATION OF LIGHTING

- A. Construction Lighting: All work conducted at night or under conditions of deficient daylight shall be suitably lighted to insure proper work and to afford adequate facilities for inspection and safe working conditions.
- B. Temporary Lighting: The BUYER shall provide a general, weatherproof, grounded temporary lighting system in every area of construction work, as soon as is practically feasible and provide sufficient illumination for safe work and traffic conditions; and run circuit wiring generally overhead, and rise vertically in locations where it will be least exposed to possible damage from construction operations on grade, floors, decks, or other recognized areas of possible damage or abuse.
- C. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- D. Maintain lighting and provide routine repairs.
- E. Permanent building lighting shall not be utilized during construction without prior written approval of the SELLER.

3.5 WATER SUPPLY

A. General: The BUYER shall provide an adequate supply of water of a quality suitable for all domestic purposes. Water used for domestic purposes shall be free of contamination and shall conform to the requirements of the State and local authorities for potable water. The BUYER shall be solely responsible for the adequate functioning of its water supply system and shall be solely liable for any claims arising from the use of same, including discharge or waste of water therefrom.

The BUYER shall coordinate with the SELLER for obtaining water service connections. The BUYER shall at no additional cost to the SELLER, provide all facilities necessary to convey the water from the source to the points of use in accordance with the requirements of the Contract Documents.

Any water capacity charges and wet tap fees shall be paid by the SELLER. All charges for water use shall be paid for by the BUYER. The BUYER shall coordinate water testing of structures with other contractors on the site in an attempt to reuse water to the maximum extent possible.

B. Water Connections: The BUYER shall not make connection to, or draw water from, any fire hydrant or pipeline without first obtaining permission of the authority having jurisdiction over the use of said fire hydrant or pipeline and from the agency owning the affected water system, and having paid the appropriate fees.

3.6 INSTALLATION OF SANITARY FACILITIES

- A. Toilet Facilities: Portable chemical toilets shall be provided wherever needed for the use of BUYER'S employees. Toilets at construction job sites shall conform to the requirements of Subpart D, Section 1926.51 of the OSHA Standards for Construction. A sanitary sewer is available in the area designated for the BUYER's field office trailer.
- B. Sanitary and Other Organic Wastes: The BUYER shall establish a regular daily collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the BUYER or organic material wastes from any other source related to the BUYER'S operations shall be disposed of away from the site in a manner satisfactory to the SELLER and in accordance with all laws and regulations pertaining thereto.

3.7 INSTALLATION OF FIRE PROTECTION

A. Fire Protection: All parts of the WORK shall be connected with the BUYER'S water supply system and shall be adequately protected against damage by fire. Hose connections and hose, water casks, chemical equipment, or other sufficient means shall be provided for fighting fires in the temporary structures and other portions of the WORK, and responsible persons shall be designated and instructed in the operation of such fire apparatus so as to prevent or minimize the hazard of fire. The BUYER'S fire protection program shall conform to the requirements of Article 34, Section 1805, b of Cal-OSHA, and Subpart F of the OSHA Standards for Construction.

3.8 OPERATIONS AND TERMINATIONS

- A. Inspections: Prior to placing temporary utility services into use, the BUYER shall inspect and test each service and arrange for governing authorities' required inspection and tests, and obtain required certifications and permits for use thereof.
- B. Protection: The BUYER shall maintain distinct markers for underground lines, and protect from damage during excavating operations.
- C. Termination and Removal: When need for a temporary utility service or a substantial portion thereof has ended, or when its service has been replaced by use of permanent services, or not later than time of substantial completion, the BUYER shall promptly remove installation unless requested by SELLER to retain it for a longer period. The BUYER shall complete and restore work which may have been delayed or affected by installation and use of temporary utilities, including repairs to construction and grades and restoration and cleaning of exposed surfaces.

D. Removal of Water Connections: Before final acceptance of the WORK on the project, all temporary connections and piping installed by the BUYER shall be entirely removed, and all affected improvements shall be restored to their original condition, or better, to the satisfaction of the SELLER and to the agency owning the affected utility.

SECTION 01520 - SECURITY & SAFETY

PART 1 - GENERAL

1.1 SECURITY PROGRAM

A. The BUYER shall:

- 1. Protect the WORK, from theft, vandalism, and unauthorized entry.
- 2. Initiate a site security program at the time of mobilization onto the worksite, which provides adequate security for site stored and installed material. The SELLER shall be the judge of what is considered adequate security. Considerations will include, but not be limited to:
 - High security locked container box in construction area; for material storage or off-site approved and bonded storage area
 - Structures designed with security locks must be capable of being secured with temporary or permanent high security locks prior to installation
- 3. Maintain the security program throughout the Contract duration.
- 4. The BUYER and Subcontractors are wholly responsible for the security of their storage compound and laydown areas, and for all their plant, material, equipment and tools at all times.
- 5. Provide the SELLER with a list of 24 hour emergency phone numbers.
- 6. Up-to-date inventory of plant material, equipment, and tools will be submitted to the SELLER as inventory arrives on site.

1.2 ENTRY CONTROL

A. The BUYER shall:

- 1. Restrict entry of unauthorized personnel onto the project site.
- 2. Allow entry only to authorized persons with proper identification.
- 3. Require all employees to sign the Employee Acknowledgment of MWWD Rules Log included at the end of this section. All employees, subcontractors, employees and lower tier BUYER employees will receive a new employee orientation, including viewing of the MWWD Program Safety Video and specific hazards and rules related to the job(s) the employees may be exposed to (Video will be provided by the SELLER). Signing the Employee Log by the employee is certifying that the orientation training has been received.

4. The SELLER has the right to refuse access to the site or request that a person be removed from the site if found violating any of the project safety, security conduct rules.

1.3 RESTRICTIONS

The BUYER shall not allow cameras on site or photographs taken except with approval of the SELLER.

1.4 BUYER'S SAFETY PERSONNEL REQUIREMENTS

The BUYER shall assign a safety person. The qualified person will be experienced in heavy construction safety and health procedures

This person's duties and responsibilities will include hazard recognition; accident prevention; new employee orientation (including subcontractors); and the maintenance and supervision of the on-site safety program.

1.5 HAZARDOUS SUBSTANCES AND THE RIGHT TO KNOW

A. The BUYER shall:

- 1. Provide the SELLER with a list of all hazardous substances the BUYER anticipates he will bring on site.
- 2. Provide a Material Safety Data Sheet (MSDS) to the SELLER prior to arrival of any hazardous substances on the project. Refer to 6.18.7.1 of the General Conditions for additional information.
- 3. Submit for approval and implement a SPILL CONTROL PLAN to the SELLER. Refer to the MWWD Health and Safety Plan available from the MWWD Library for detailed requirements.
- 4. Stage storage area(s) must be approved by SELLER. Obtain approval of storage areas from the SELLER prior to storage of any hazardous materials.

1.6 JOB SAFETY ANALYSIS (JSA)

A. The BUYER shall:

1. Outline the sequence of the work, equipment to be used, identify hazards that may exist or may be created and what procedures and/or safety equipment will be used to eliminate or reduce these hazards. A written SCOPE OF WORK JSA shall be prepared and submitted prior to the start of construction activities on the project. The name of the competent person assigned to this activity will be included in the JSA.

2. Complete a written JSA, if requested by the SELLER for any activity which may be of an unusual nature or involves unique hazards (Refer to MWWD Program Safety and Health Plan).

1.7 REPORTS

A. The BUYER shall:

- 1. Provide to the SELLER copies of the BUYER's and subcontractor's;
 - a. first aid log (monthly)
 - b. OSHA 200 injury log (monthly)
 - c. certification of new employee orientation (monthly)
 - d. safety meeting reports and topics (monthly)
 - e. list of competent persons as required by Cal/OSHA and the Project Health and Safety Manual (when updated)
 - f. conduct weekly safety inspections with the SELLER safety representative. Deficiency reports will be returned in 48 hours indicating corrective actions taken
 - g. injury and accident reports will be submitted to the SELLER within 24 hours of any incident. IMMEDIATE notification to the SELLER of an accident is REQUIRED. Full cooperation with the SELLER accident investigation is required
 - h. provide SELLER with records of employee and supervisor training including subcontractors
 - i. provide SELLER with Safety and Health Plan
- 2. A monthly audit of the BUYER's safety records and performance will be conducted by the SELLER SAFETY SELLER'S. A BUYER's failure to mitigate hazards may be cause for delaying the approval of the monthly progress payment request.

1.8 MWWD HEALTH AND SAFETY PLAN

- A. The SELLER has prepared a Program Safety and Health Manual.
- B. The Program Safety and Health Manual sets forth basic responsibilities, guidelines, rules, and regulations for all personnel involved in the construction of the Metropolitan Wastewater Department (MWWD) Projects. The manual does not cover the full spectrum of the published safety and health standards which are mandated by law.
- C. In the event of a conflict between the provisions of the Manual and applicable local, state or federal safety and health laws, regulations and/or standards, or the Contract Documents; the more stringent shall apply.

1.9 PROJECT SITE SECURITY SERVICES AND ACCESS CONTROL

A. The BUYER shall:

Monitor the passage of personnel, vehicles, materials and equipment entering and leaving the site.

B. Other duties:

The BUYER will respond to requests from the SELLER to perform additional duties as follows:

- 1. Direct emergency vehicles or equipment to an on-site location.
- 2. Monitor labor action and document events, direct personnel, vehicles, materials, and equipment.
- 3. Monitor security for equipment and/or material temporarily stored along the access road or in the parking area.
- 4. Maintaining record of insurance files for all vehicles permitted on-site.
- 5. Maintaining daily security report files.
- 6. Notify the SELLER of security violations and enter all facts regarding the incident in the Security Log. The Security Log shall be transmitted to the designated SELLER's representative on a daily basis on the day following the last shift in the daily security report.
- 7. Assist the SELLER Safety/Security SELLER'S to remove personnel denied access to the site for violation of site regulations.
- 8. Inspect construction area lighting on a daily basis and report deficiencies to the SELLER.
- 9. Call the designated SELLER's representative to report a fire, hazardous material spill, or medical emergency. Report the emergency to the fire department as directed by the SELLER.
- 10. Notify the SELLER of all unusual activities/occurrences.

1.10 SELLER'S SAFETY RESPONSIBILITIES

- A. The SELLER is responsible for the overall coordination and implementation of safe WORK practices and the maintenance of a safe WORK environment at the various construction sites under its control.
- B. In order to meet its safety requirements, the SELLER must rely upon the efforts of such BUYER to maintain a safe and healthful WORK environment for its employees and the employees of its lower tier BUYERs.
- C. The SELLER shall make periodic inspections of each BUYER'S WORK area. When possible, these inspections shall be made in conjunction with the BUYER'S site safety representative. Written reports of all such inspections shall be p resented to the affected BUYER.
- D. The SELLER has authority to take the following actions in the name of the SELLER to maintain a safe and healthful WORK environment from craftsmen and others employed at the construction sites:
 - 1. When presented with instances of imminent danger situation, i.e., activities which could result in death or serious physical injury to the employees or involve the general public, the SELLER has the authority to stop the WORK until such time as corrective action is taken to eliminate the hazard. In exercising this authority, the BUYER shall have no recourse against either the SELLER or the SELLER for any damages that may arise as a result of such stoppage. Established WORK schedules, contract milestones, or contract completion dated will not be extended to accommodate the period of any such stoppage.
 - 2. The SELLER shall have the authority to effectively recommend to the SELLER the removal from the site of any person who is regarded as a frequent violator of safe WORK practices, or who fails to ensure persons working under their supervision or in a WORK place they control are not exposed to serious WORK hazards.
 - 3. When confronted with a non-imminent danger violation, the SELLER will advise the responsible BUYER of the condition, and obtain a date from that BUYER by which the non-imminent danger condition will be abated. In addition, the responsible BUYER will erect a temporary barrier or adopt other means to prevent the exposure of its employees and others to the non-imminent danger condition. If the responsible BUYER fails to take corrective action by the identified abatement date, the SELLER has authority to retain the necessary craftsmen to perform the WORK with the costs for all such labor and material being back charged against the responsible BUYER. In exercising this authority, the BUYER shall have no recourse against either the SELLER or the SELLER for any damages that may arise as a result of such stoppage. Established WORK schedules, contract

- milestones, or contract completion dated will not be extended to accommodate the period of any such stoppage.
- E. The SELLER will assist the City of San Diego Metro Wastewater Department in the inspection of the construction projects and enforcement of identified violations.
 - 1. The SELLER will assist the City of San Diego with their inspection.
 - 2. The SELLER will notify the effected BUYER of the violations and date for corrective action.
 - 3. If a BUYER fails to correct the violations in the time allotted. A Safety Notice of Non-Compliance will be issued giving the BUYER 24 hours to comply.
 - 4. Failure to correct these violations will result in the SELLER retaining services from others to correct the violations and charges back the responsible BUYER.
- E. The BUYER will indemnify the SELLER and SELLER against fines, reasonable attorneys' fees, and defense costs resulting from citations issued to the SELLER by either federal, state, or local safety enforcement agencies due to the BUYER'S failure to abide by applicable safety and health standards.

PART 2 - PRODUCTS AND PLANS

- 2.1 BUYER Safety and Security Plan
 - A. Prior to the performance of any work the BUYER will submit to the SELLER for review and comment two copies of a contract specific Safety/Health and Security Plan signed by an officer of the BUYER's organization. Adequacy is the responsibility of the BUYER.

The SELLER will not review the BUYER's safety plan for the adequacy of the plan.

The plan shall:

- 1. Identify the person(s) responsible for implementation and enforcement of Safety/Health and Security rules and regulations for this project.
- 2. Generally address safe work procedures for the activities within the BUYER's scope of work.
- 3. Included a new employee orientation program which addresses job and site specific rules, regulations and hazards (refer 01520.2).
- 4. Include the BUYER's Drug Free Work Place Policy.

- 5. Include provisions to protect all of the BUYER's employees, other persons and organizations who may be affected by the work from injury, damage or loss.
- 6. Comply with current OSHA, Cal OSHA, Project Health and Safety Manual, facility safety program (when applicable), and locally accepted safety codes, regulations and practices.
- 7. Assign a qualified, experienced site safety person. This person's resume shall be submitted to the CM for review and acceptance. For requirements see Specification Section 01520.
- 8. Include a site specific emergency action and evacuation plan.
- 9. Include Hazard Communication/Right To Know Program (refer to 01520).
- 10. Include security procedures for the BUYER's work, tools, and equipment.
- 11. Include the capability of providing the SELLER with documentation to show compliance with their plan, plus accidents and investigation reports (refer to section 01520, Safety and Security).
- 12. Address any other contract specific requirement.
- B. Provide a Job Safety Analysis (JSA) for the scope of work, prior to the start of work.
- C. Review of the BUYER's Safety Plan by the SELLER shall not impose any duty or responsibility upon the SELLER for the BUYER's performance of the work in a safe manner.
 - However, if the plan is found by the SELLER not to meet the requirements established by OSHA, Cal OSHA, the Project Safety Manual, or other applicable codes and regulations, the Plan will be returned for revision. Acceptance of this Plan by the SELLER is required prior to the start of any site activity. Requests for additional contract time or compensation associated with delays in acceptance of the Plan, start of the work, or implementation of the Plan will not be approved by the SELLER.
- D. The BUYER shall be fully responsible for the safety and health of its employees, its subcontractors and lower tier BUYERs during performance of its work.
- E. The BUYER shall provide the SELLER with all safety reports, training records, competent person list, and accident reports prepared in compliance with Cal OSHA and the Project Health and Safety Plan.

- 2.2 Written Job Safety Analysis required by this Section.
- 2.3 Reports required by this Section.
- 2.4 Safety representative qualifications required by this Section, Paragraph 1.4

PART 3 - EXECUTION (Not Used)

EMPLOYEE

ACKNOWLEDGMENT OF THE METROPOLITAN WASTEWATER DEPARTMENT (MWWD) RULES

By Signing this Employee Log. I acknowledge the I understand and agree to abide by the project rules outlined below.

PROHIBITED ACTIVITIES

- ! Unauthorized removal or theft of CITY's property ! Violation of safety or security rules or procedures
- Possession of firearms or lethal weapons on jobsite
- ! Acts of sabotage
- ! Destruction or defacing CITY's property
- ! Failure to use sanitary facilities
- ! Failure to report accidents or job related injuries
- Under the apparent influence of drugs, alcohol or other intoxicants or in possession of drugs, alcohol or other intoxicants on the property
- ! Wearing shorts or tennis shoes on the jobsite
- ! Failure to wear a hardhar
- ! Gambling at any time on the project
- Fighting, threatening behavior, or engaging in horseplay on the project
- ! Smoking in unauthorized areas on the project
- ! Open fire cooking or making unauthorized fires on project property
- Selling items or raffles without authorization

- ! Use of unauthorized cameras on the project
- ! Use of radio or television in the construction area
- Failure to park personal vehicle in authorized parking area
- : Failure to wear designated identification [Site Specific]
- ! Failure to use designated gates

I have read, understand and agree to abide by the PROGRAM SITE RULES. Furthermore, I understand failure to abide by these rules is grounds for being denied access to the project site. I have received a personal copy for my use and reference.

EMPLOYEE LOG

BY SIGNING THIS LOG ACKNOWLEDGMENT I HAVE READ AND UNDERSTAND AND AGREE TO ABIDE BY THE PROJECT RULES OUTLINED ABOVE AND ALL STATE, FEDERAL, LOCAL, OR ANY OTHER CONTRACT OBLIGATIONS THAT MAY APPLY. I FURTHER ACKNOWLEDGE THAT I HAVE BEEN ORIENTATED AS TO THE SITE SPECIFIC HAZARDS, ANY HAZARDOUS SUBSTANCES I MAY BE EXPOSED TO WHILE ON THE SITE AND THE SITE/COMPANY EMERGENCY ACTION PROCEDURES, BY A REPRESENTATIVE OF THE COMPANY.

EMPLOYEES (PRINT)	SIGNATURE	COMPANY NAME	DATE
			
Signature of Company Representative		Date Signed	

SECTION 01530 - PROTECTION OF EXISTING FACILITIES

PART 1 - GENERAL

1.1 GENERAL

The BUYER shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such Damage or temporary relocation, all in accordance with requirements of the Contract Documents.

1.2 EXISTING UTILITIES AND IMPROVEMENTS

- A. General: The BUYER shall protect all Existing Utilities and other improvements which may be impaired during construction operations. It shall be the BUYER'S responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The BUYER shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.
- B. Utilities to be Moved: In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the BUYER, be notified by the SELLER to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the BUYER shall notify the SELLER a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.
 - C. Where the proper completion of the WORK requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the BUYER shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the SELLER and the Seller of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the BUYER in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.
 - D. SELLER's Right of Access: The right is reserved to the SELLER and to the Cities of public utilities and franchises to enter at any time for the purpose of making changes in their property made necessary by the WORK of this Contract.
 - E. All costs of locating, repairing damage not due to failure of the BUYER to exercise reasonable care, and removing or relocating such utility facilities not shown in the Contract Documents with reasonable accuracy, and for equipment on the project which was actually working on that portion of the work which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such work will be paid for as extra work in accordance with the provisions of Article 10 of the General Conditions

- F. Approval of Repairs: All repairs to a damaged improvement are subject to inspection and approval by an authorized representative of the utility or improvement Seller before being concealed by other work.
- G. Maintaining in Service: All power, and telephone or the communication cable ducts, gas and water mains and communication wires and cables encountered along the line of the WORK shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the SELLER are made with the Seller of said pipelines, duct, or wire or cable. The BUYER shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

1.3 NOTIFICATION BY THE BUYER

Prior to any work in the vicinity of any existing utilities, including all water, gas, all electric power, communications, or television cables; the BUYER shall notify the SELLER not less than three (3) days nor more than seven (7) days prior to work so that a representative of Building Maintenance SELLER can be present during such work, if they so desire.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01550 - SITE ACCESS AND STORAGE

PART 1 - GENERAL

1.1 HIGHWAY LIMITATIONS

A. The BUYER shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress to the site of the WORK. It shall be the BUYER'S responsibility to construct and maintain any haul roads required for its construction operations.

1.2 BUYER'S WORK AND STORAGE AREA

- A. If necessary, the SELLER will designate and arrange for the BUYER'S use, a portion of the property for its exclusive use during the term of the Contract as a temporary laydown area for its construction operations relative to this contract.
- B. The BUYER shall make its own arrangements for any necessary off-site storage or shop areas necessary for the proper execution of the WORK.
- C. The BUYER shall construct and use a separate storage area for hazardous materials used in constructing the WORK.
 - 1. For the purpose of this paragraph, hazardous materials to be stored in the separate area are all products labeled with any of the following terms: Warning, Caution, Poisonous, Toxic, flammable, Corrosive, Reactive, or Explosive. In addition, whether or not so labeled, the following materials shall be stored in the separate area: diesel fuel, gasoline, new and used motor oil, hydraulic fluid, cement, paints and paint thinners, two-part epoxy coatings, sealants, asphaltic products, glues, solvents, wood preservatives, sand blast materials, and spill absorbent.
 - 2. The BUYER shall develop and submit to the SELLER a plan for storing and disposing of the materials above.
 - 3. The BUYER shall obtain and submit to the SELLER a single EPA number for wastes generated at the site.
 - 4. The separate storage area shall meet all the requirements of all authorities having jurisdiction over the storage of hazardous materials. Such authorities are: Cal-OSHA, SDAPCD, San Diego County Health Department, Regional Water Quality Control Board, and City of San Diego Industrial Waste Division.

- 5. The separate storage area shall be inspected by the City of San Diego Hazardous Materials Management Division prior to construction of the area, upon completion of construction of the area, and upon cleanup and removal of the area.
- 6. All hazardous materials which are delivered in containers shall be stored in the original containers until use. Hazardous materials which are delivered in bulk shall be stored in containers which meet the requirements of authorities having jurisdiction.

1.4 PARKING

- A. Available parking on site is limited. The BUYER maybe required to encourage employees to carpool whenever practical. The BUYER shall:
 - 1. The BUYER shall direct its employees to park in areas indicated as directed by the SELLER.
 - 2. Traffic and parking areas shall be maintained in a sound condition, free of excavated material, construction equipment, mud, and construction materials. The BUYER shall repair breaks, potholes, low areas which collect standing water, and other deficiencies.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not used)

SECTION 01560 - TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 - GENERAL

1.1 AIR QUALITY

- A. General: The BUYER shall not create significant direct air quality impacts during the performance of the WORK. The BUYER shall take corrective measures, as required by the SELLER, to prevent significant air quality impacts during the work period.
- B. Equipment Control: All motorized construction vehicles operating onsite for more than 90 days shall have a low NOx emission engine tuneup. Documented proof of tuneups shall be made available to the SELLER when requested.
- C. Management: The BUYER shall encourage ride sharing among BUYER personnel and shall develop a voluntary ride share program.

1.2 RUBBISH CONTROL

C. During the progress of the WORK, the BUYER shall keep the site of the WORK and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish. The BUYER shall provide sufficient dumpsters and trash containers for collection of rubbish. The BUYER shall dispose of all rubbish and waste materials of any nature occurring at the work site, and shall establish regular intervals, at least weekly, for collection and disposal of such materials and waste. The BUYER shall also keep all roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of all rubbish and surplus materials shall be off the site of construction in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of Part 1926 of the OSHA Safety and Health Standards for Construction. The BUYER shall not dispose of rubbish or debris into storm drains or stream channels.

1.3 SANITATION

- A. Toilet Facilities: Portable chemical toilets shall be provided wherever needed for the use of employees. Toilets at construction job sites shall conform to the requirements of Part 1926 pf the OSHA Standards for Construction.
- B. Sanitary and Other Organic Wastes: The BUYER shall establish a regular daily collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the BUYER or organic material wastes from any other source related to the BUYER'S operations shall be disposed of away from the site in a manner satisfactory to the SELLER and in accordance with all laws and regulations

pertaining thereto.

1.4 CHEMICALS

- 1. All chemicals used during project construction or furnished for project operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant or of other classification, shall be stored in accordance with the manufacturer's instructions. The BUYER shall maintain copies of Material Safety Data Sheets for all chemicals used or furnished by the BUYER. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer
- Al chemicals used during the project construction or furnished for project 2. operation, whether defoliant, soil sterilant, herbicide, pesticide, fertilizer, disinfectants, polymers, reactants, fuel, oil, hydraulic fluid, detergent, paint, solvent, glue, or any other classification, shall be stored within a containment area that minimizes contact of the chemicals and the storage containers with precipitation and surface water flows due to precipitation or flows from adjacent areas. If precipitation or surface water flows contact the chemicals or the storage containers, the BUYER shall notify the SELLER to determine if the surface water has been contaminated or may be allowed to be discharged to the storm drains or stream channels. If the surface water flows have become contaminated due to contact with the chemicals or the storage containers, the BUYER shall provide for removal and/or treatment of the surface water flows at no additional costs to the SELLER. If spills occur in the containment area, the BUYER shall immediately notify the SELLER and shall contain and cleanup the spill to prevent spilled material fro entering storm drains, stream channels, or groundwater or from being absorbed by the underlying pavement or soil.
- 3. All chemicals shall be stored, handled, and used in compliance with the appropriate regulatory agency requirements.

1.5 HAZARDOUS MATERIALS

- A. The BUYER shall collect waste oil, used oil filters, other waste petroleum materials, and any other BUYER generated hazardous materials. Remove and legally dispose of all waste petroleum products and any other BUYER generated hazardous materials at suitable disposal facilities off of the job site at the BUYER'S expense.
- B. On site temporary fuel storage facilities shall be constructed to comply with current regulations. Such facilities shall be diked to contain any fuel spills. Fuel tanks shall be properly grounded.
- C. The BUYER shall park construction vehicles in locations designated by the SELLER.

The BUYER shall provide oil drip pans to contain any oil leakage from construction vehicles.

1.6 TRAFFIC CONTROL

- A. Work Hours: Normal work hours shall be from 7:00 a.m. to 3:30 p.m.
- B. Truck Traffic: The BUYER shall schedule truck deliveries and hauling to and from the construction site prior to 4:30 p.m. on weekdays. Truck deliveries or hauling on weekends or holidays shall require prior approval by the SELLER.

1.3 PROGRESS CLEANING

- A. The BUYER shall maintain areas free of waste materials, debris, and rubbish. The site shall be maintained in a clean and orderly condition. Broom all concrete or other finished work areas at least once per month, prior to each progress payment request. Where material or debris has washed or flowed into or has been placed in existing watercourses, ditches, shoreline areas or elsewhere, remove such material or debris and legally dispose of it during the progress of the WORK.
- B. Remove debris and rubbish from channels, wet wells, clarifiers, pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

1.4 SITE MAINTENANCE

The BUYER is responsible for site maintenance in the BUYER's work area, laydown area, and in all areas impacted by the BUYER's work activities. Such site maintenance activities include but are not limited to rubbish control, fence repair, and maintenance of construction parking lots, maintenance of erosion, and sediment control facilities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01570 - TRAFFIC REGULATION

PART 1 - GENERAL

1.1 GUIDANCE

A. The BUYER shall comply with the guidance provided by the Local Authorities, the State Department of Transportation, Specification Requirements, Permit Restrictions, and any other Governing Source, when regulating traffic on public roads.

1.2 CONSTRUCTION PARKING CONTROL

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and SELLER'S operations.
- B. Monitor parking of construction personnel's vehicles. No personal vehicles will be permitted beyond the designated construction parking area. Maintain vehicular access to and through parking areas.
- C. Prevent parking on or adjacent to access roads or in non-designated areas.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01600 - PRODUCTS, MATERIALS, EQUIPMENT, AND SUBSTITUTIONS

PART 1 - GENERAL

1.1 DEFINITIONS

- A. The word "Products," as used herein, is defined to include purchased items for incorporation into the WORK, regardless of whether specifically purchased for the project or taken from BUYER's stock of previously purchased products. The word "Materials," is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of work. The word "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items). Definitions in this paragraph are not intended to negate the meaning of other terms used in the Contract Documents, including "specialties," "systems," "structure," "finishes," "accessories," "furnishings," special construction," and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- B. Neither "Products" nor "Materials" nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying and erection of the WORK.

1.2 QUALITY ASSURANCE

- A. Source Limitations: To the greatest extent possible for each unit of work, the BUYER shall provide products, materials, and equipment of a singular generic kind from a single source.
- B. Compatibility of Options: Where more than one choice is available as options for BUYER's selection of a product, material, or equipment, the BUYER shall select an option which is compatible with other products, materials, or equipment. Compatibility is a basic general requirement of product, material and equipment selections. Where similar products (such as grease fittings, flexible couplings, etc.) are used on different pieces of equipment or in different areas within the WORK, standardize the products by providing all products from the same supplier.

1.3 PRODUCTS

- A. General: Only products meeting the indicated requirements shall be provided.
- B. Manufacturers: Products shall be new, of current manufacture, and shall be the products of reputable manufacturers specializing in the manufacture of such products who have had previous experience in manufacturing similar products.

C. Products: Materials shall be suitable for the intended purpose and free of defects and shall be recommended by the manufacturer for the application indicated. Where a specific manufacturer or manufacturer's model number is indicated, the equipment shall be modified, as necessary, to comply with the specified features, materials, performance and functions.

1.4 PRODUCT DELIVERY AND STORAGE

A. The BUYER shall deliver and store all products in accordance with manufacturer's written recommendations and by methods and means which will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at site and overcrowding of construction spaces. In particular, the BUYER shall ensure coordination to ensure minimum holding or storage times for flammable, hazardous, easily damaged, or sensitive materials to deterioration, theft, and other sources of loss.

1.5 TRANSPORTATION AND HANDLING

- A. Products shall be transported by methods to avoid damage and shall be delivered in undamaged condition in manufacturer's unopened containers and packaging.
- B. The BUYER shall provide equipment and personnel to handle products, materials, and equipment including those provided by SELLER, by methods to prevent soiling and damage.
- C. The BUYER shall provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.

1.6 STORAGE AND PROTECTION

- A. Products shall be stored in accordance with manufacturer's written instructions and with seals and labels intact and legible. Sensitive products shall be stored in weather-tight climate controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's recommendations.
- B. For exterior storage of fabricated products, products shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering and ventilation shall be provided to avoid condensation.
- C. Storage shall be arranged to provide access for inspection. The BUYER shall periodically inspect to assure products are undamaged and are maintained under required conditions.

D. Storage shall be arranged in a manner to provide access for maintenance of stored items and for inspection.

1.7 MAINTENANCE OF STORAGE

- A. Stored products shall be periodically inspected on a scheduled basis. The BUYER shall maintain a log of inspections and shall make the log available on request. On equipment placed in storage, permanently attach protective procedures to be taken, the date work is actually performed, and signature of the BUYER's technician actually performing the work.
- B. The BUYER shall comply with manufacturer's product storage requirements and recommendations.
- C. The BUYER shall maintain manufacturer-required environmental conditions continually.
- D. The BUYER shall ensure that surfaces of products exposed to the elements are not adversely affected and that weathering of finishes does not occur.
- E. For mechanical and electrical equipment, the BUYER shall provide a copy of the manufacturer's service instructions with each item and the exterior of the package shall contain notice that instructions are included.
- F. Products shall be serviced on a regularly scheduled basis, and a log of services shall be maintained and submitted as a record document prior to acceptance by the SELLER in accordance with the Contract Documents.
- G. Provide protective maintenance during storage consisting of:
 - 1. Inspecting mechanical surfaces for signs of corrosion or other damage, lubricating, or applying any coatings as recommended by the equipment supplier for protection; and all other precautions for proper protection of all equipment stored.
 - 2. Providing compliance with suppliers' storage requirements to maintain warranties.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 01660 - FACILITY START-UP

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

- A. Start-up is defined as the initial operation of a facility and/or plant, utilizing solar radiation which the facility has been designed to process.
- B. The BUYER shall be required to start up the facility, under direction of the SELLER, operate it, and pass a eight (8) hour test prior to Substantial Completion. All equipment must properly run for the test period at rates indicated by the approved test plan. If any item malfunctions during the test, the item shall be repaired and the test restarted at day zero with no credit given for the operating time before the malfunction.
- C. The purpose of this eight (8) hour test is to:
 - 1. Provide the environment by which the BUYER can place equipment and systems into service.
 - 2. Expose flaws or defects in workmanship, equipment, or materials, not previously discovered that are the responsibility of the BUYER to repair, correct, modify, or replace, at the option of the SELLER, prior to Final Acceptance.

1.2 SERVICES OF MANUFACTURER

- A. Manufacturer's services for inspection, physical checkout, field adjustment, field testing, and start-up shall comply with the requirements of this Section, the requirements of the particular equipment or product technical specifications, and the requirements of the following sections:
 - 1. Section 01680, Physical Checkout; Shop, Field, and Functional Testing
- B. Manufacturer's services for training and instruction of SELLER's personnel shall comply with the requirements of the particular equipment or product technical specifications.

1.3 ROLES AND RESPONSIBILITIES:

- A. BUYER'S responsibilities:
 - 1. Develop specific start-up plan.
 - 2. Schedule and coordinate with the SELLER for start-up of equipment and systems.

- 3. Review outstanding punchlist items with the SELLER three (3) days prior to the scheduled start-up; and complete, correct, or resolve at the option of the SELLER, any items which impact or interfere with the facility start-up.
- 4. Attend meetings related to the review of start-up plan.
- 5. Clarify submittals, testing requirements, schedules, or other items related to the start-up of the equipment and facilities specified and indicated in the Contract Documents.
- 6. Provide all start-up materials and operating supplies.
- 7. Provide Supplier's authorized representatives as required to supervise placing equipment or systems in operation and provide guidance during the start-up period.
- 8. Provide to the SELLER a list of twenty-four (24) hour, "on call" representative supervisory persons who will monitor the facility start-up, and serve as a liaison for the SELLER and the SELLER.
- 9. Provide the necessary craft or labor assistance full time during the day shift and as required at other times in the event of an emergency requiring immediate attention. An emergency is defined as a failure which precludes the further operation of a critical segment of; or the whole of the WORK. The response time shall be not less than four hours from the time of notification.
- 10. Correct all failures or equipment problems identified during start-up when notified by the SELLER. Repairs deemed the responsibility of the BUYER shall be made at no additional cost to the SELLER.
- 11. Provide training of SELLER'S personnel as specified.
- B. The SELLER's responsibilities during the facility start-up period include the following:
 - 1. Support the facility start-up activities.
 - 2. Provide trained staff to operate and maintain SELLER'S equipment, systems, and facilities required during start-up.
 - 3. Provide all utilities including power, natural gas, and water, as needed.
- C. The SELLER's responsibilities for the facility start-up period include the following:

000815 doordinate the start-up.

- 2. Assisting the BUYER in developing specific start-up schedule(s).
- 3. Verify the results of performance tests and any retesting.
- 4. Assist the SELLER in the evaluation of performance test results and retesting.
- 5. Direct the BUYER to repair defective workmanship, materials, and equipment.

1.4 DELAYED START-UP

- A. In the event the equipment, systems and facilities provided under this Contract, are unable to enter the "start-up" phase as defined herein prior to the Contract completion date, due to circumstances beyond the control of the BUYER, the SELLER may direct the BUYER, in writing, to provide the following. A change order will be prepared for the cost of the following items if the delayed start-up is due to circumstances beyond the control of the BUYER.
 - 1. Prepare and submit a plan to the SELLER for placing and maintaining the WORK in a state of "protective maintenance." The plan will define extended storage and preventive maintenance requirements for a period up to and including one (1) year. The SELLER will review and approve the plan. Details of the plan shall include the following:
 - a. Procedures and schedules for extended storage, equipment protection, equipment rotation, lubrication, and other requirements to place the WORK in a "protective maintenance mode".
 - b. Weather protection and security requirements for the facility and for the equipment.
 - c. Special requirements for damage protection or safety.
 - d. Requirements for storage and protection of auxiliary equipment and initial operating supplies.
 - e. Procedures, schedules, lubrication, calibration, recertification by suppliers, and other items required to return the WORK to a "start-up" condition.
 - 2. In the event the start-up is delayed beyond the Contract completion date, the BUYER may be directed to prepare the protective maintenance plan described above, and to initially prepare the equipment and facility for mothballing in compliance with manufacturers' recommendations and the protective maintenance plan.

- B. In the event the start-up is delayed beyond the Contract completion date, the BUYER shall be responsible for executing a preventative maintenance program for the facility and all equipment in accordance with the manufacturers' recommendations and the protective maintenance plan. The preventative maintenance program shall include such items as periodic rotation of equipment, lubrication, and temporary environmental controls, etc.
- C. In the event a delayed start-up plan is approved and accepted by the SELLER, and the BUYER is directed in writing by the SELLER to proceed with implementation, the SELLER will prepare a delayed start-up punchlist which defines the items and services which are not completed due to delayed start-up, and their value.

1.5 EARLY COMPLETION

C. In the event the BUYER completes all contractual work prior to the Contract completion date, except for items associated with facility start-up, the BUYER shall protect and maintain the entire facility and all equipment in accordance with the manufacturer's recommendations. The cost of any such preventive maintenance activities shall be borne by the BUYER through the Contract completion date.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

** END OF SECTION **

SECTION 01680 - PHYSICAL CHECKOUT: SHOP, FIELD, AND FUNCTIONAL TESTING

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. The physical inspection and testing requirements in this Section are in addition to those requirements defined in the pertinent technical documents. These activities shall be performed prior to substantial completion.
- B. Provide the following checkout and testing activities:
 - 1. Shop Testing of equipment as specified herein.
 - 2. Physical checkout and inspection of equipment and materials to verify conformance of the installed equipment and materials to the Contract Document.
 - 3. Field Testing of equipment as specified herein.
 - 4. Functional Testing of equipment as specified herein.
- C. Provide a Checkout Plan covering the entire checkout and testing process in conformance with the Contract Documents, and as specified herein.

1.2 DEFINITIONS:

- A. Shop Testing is defined as testing that is done by the Supplier either at the place of manufacture, the place of assembly, or at another location where the required testing apparatus is located, for the purpose of proving that the Products meet the requirements of the pertinent technical specification(s). The administrative procedures for shop testing are specified in paragraph 1.7 of this Section, while the technical requirements are included in the pertinent technical documents. The minimum acceptable test criteria are specified in paragraph 1.5 of this Section.
- B. <u>Physical Checkout</u> is defined as the process of physically inspecting Products after they have been installed to determine if the Products have been properly and completely installed, comply with the approved shop drawings and are ready for Field and/or Functional Testing. The requirements for Physical Checkout are contained in the pertinent technical documents and in paragraph 1.9 of this Section.

- Well Testing is defined as testing that is performed by the BUYER, and/or Subcontractors, with Supplier assistance, on Products after they have been installed, and after the performance of physical checkout, for the purpose of proving that the tested Products meet the requirements of the pertinent technical specifications. Field testing is required regardless of whether or not shop testing was performed on the same piece of equipment or material. The administrative requirements for field testing are specified in paragraph 1.8 of this Section, while the technical requirements are contained in the pertinent technical documents. The minimum acceptable test criteria are specified in paragraph 1.5 of this Section.
- D. <u>Functional Testing</u> is defined as testing performed by the BUYER on a "system" normally comprised of two or more pieces of equipment, after the equipment has been installed, and after Physical Checkout and Field Testing have been completed, for the purpose of proving that the system meets requirements as specified and as indicated. The administrative requirements for Functional Testing are specified in paragraph 1.11 of this Section, while the technical requirements are specified in the technical documentation.
- E. The Supplier's Representative or Manufacturer's Representative is defined as a person, or persons provided by the Supplier, who is qualified by having the training and experience, to provide technical and/or process related advice, and/or assistance, relating to the installation or utilization of the Products provided by that same Supplier. The Supplier's Representative or Manufacturer's Representative shall be a Professional Engineer registered in the discipline most appropriate for the product provided or approved by the SELLER.
- F. The Testing. Checkout, and Start-Up Coordinator is defined as the person provided by the BUYER to coordinate and oversee the total spectrum of testing and inspection activities required by the Contract Documents. The Testing and Checkout and Start-Up Coordinator shall be a Professional Engineer registered in the discipline most appropriate for the equipment to be tested and checked out or approved by the SELLER.

1.3 ROLES and RESPONSIBILITIES:

A. The BUYER shall provide all outside services, materials, labor, supplies, test equipment and other items necessary to perform the testing specified herein and interim connections. In addition the BUYER shall arrange for and provide the participation or assistance of survey crews, engineers, quality control technicians, Suppliers' and/or Manufacturer's representative(s), and required utility, regulator, or governmental agency representatives.

- B. The BUYER shall provide the services of the Supplier's and/or Manufacturer's representative(s) as follows:
 - 1. Shop Testing as specified herein.
 - 2. Assistance during installation.
 - 3. Field Testing as specified herein.
 - 4. Functional Testing as specified herein.
- C. The Supplier's and/or Manufacturer's representative activities required by this Section are in addition to the requirements for vendor training and other services specified elsewhere in the Contract Documents. Timing for the performance of these services shall be defined in the Checkout Plan, specified herein.
- D. The SELLER and/or SELLER may review and comment on the BUYER's deliverables, participate in the physical inspection activities, witness the shop and field testing, witness loop checks, witness functional testing, and provide verification of conformance to the specifications.
- E. The BUYER shall be responsible for incorporating these procedures into the CPM schedule. No additional time or compensation will be approved relating to delays associated with these requirements.

1.4 WITNESSING OF TESTS

Unless otherwise noted, provide a minimum of 7 days written notice to the SELLER so that the SELLER, the SELLER, or its representatives may have the opportunity to witness the Shop tests, Field tests, Loop checks, and Functional tests. The SELLER and the SELLER may witness the performance of any or all tests, at their option. The SELLER's or SELLER's witnessing of tests does not relieve the BUYER of its obligation to comply with the requirements of the Contract Documents.

1.5 CHECKOUT PLAN

- A. The BUYER shall submit a Checkout Plan based upon the requirements defined herein, and the Technical Documentation to the SELLER. Six (6) copies and 1 (one) copy on electronic media (WordPerfect) of the preliminary Checkout Plan shall be submitted for review within 30 days of the Notice to Proceed or 60 days prior to the proposed date of the first test, whichever occurs first. The plan shall define:
 - 1. The equipment and applicable technical documents for the equipment
 - 2. The logical and systematic performance of physical inspections, shop tests, field tests, loop checks, and functional tests including:

- a. A chronological schedule of all testing, checking, and inspection activities.
- b. A checklist of all inspection, checking, and testing activities broken down by location, discipline, system, and device or item.
- c. All blank forms proposed by the BUYER for verification or recording for all testing.
- d. An index which cross references the forms to their intended application(s).
- e. A list of all shop tests, and supplier certifications, including those required by the applicable technical documentation. Provisions shall also be included for re-testing, in the event it is required.
- 3. Participants in the testing.
- 4. Special test equipment.
- 5. Sources of the test media (water, power, air).
- 6. The proposed method of delivery of the media to the equipment to be tested.
- 7. Temporary or interim connections for the sequencing of multiple units.
- 8. Ultimate proper disposal of the test media.
- B. The plan will be reviewed by the SELLER, modified or revised within 15 days as necessary by the BUYER, then approved by the SELLER. The BUYER shall continue to update the Checkout Plan, working in conjunction with the SELLER prior to the start of the scheduled equipment checkout and functional testing activities. Each specific element of the plan must receive written approval by the SELLER at least two weeks prior to the actual commencement of testing.
- C. The BUYER shall designate, in the Checkout Plan, a Testing, Checkout, and Start-Up Coordinator, to coordinate and manage the activities defined in the checkout plan, as approved by the SELLER.

1.6 PHYSICAL CHECKOUT AND INSPECTIONS

A. Physical Checkout and inspections provide verification of conformance to the requirements of the Technical Documentation and Contract Drawings for physical presence; dimensions; and location, for proper materials, parts, and items; and for integrity of materials, equipment and systems to determine their condition and readiness for field and/or functional testing. Inspection includes the following elements, as applicable.

- 1. Piping systems for material, size, components, direction, alignment of joints and bolting/welding, valves, packing and seals, screens, filters and strainers, painting, identification labeling and color coding, hangers, anchors, supports, and expansion provisions.
- 2. Electrical and control/instrumentation systems for conduit and tray installation, wire/cable material and size, circuit identification, terminal installation and identification, major switches, circuit breakers and components, and labeling for system identification.
- B. Inspection will verify that pipes, conduits, equipment, systems, areas and other items provided under the Contract are clean and free from debris or materials which may interfere with subsequent testing requirements or routine operations. Correct unsatisfactory conditions prior to testing or acceptance.
- C. Upon completion of the inspection, submit to the SELLER six copies of each completed inspection form, signed by an authorized representative of the BUYER who participated in the inspection. The SELLER will review and approve the contents of the forms. Should a re-inspection be required, it shall be performed at no additional cost to the SELLER.

1.7 FIELD TESTING OF EQUIPMENT

- A. BUYER Personnel: The BUYER shall provide the services of an experienced and authorized Supplier's or Manufacturer's representative for each item of equipment indicated in the equipment schedules, who shall visit the site of the WORK and inspect, check, adjust if necessary, and approve the equipment installation. In each case, the BUYER shall arrange to have the Supplier's or Manufacturer's representative revisit the job site as often as necessary until any and all trouble is corrected and the equipment installation and operation are satisfactory to the SELLER. The BUYER shall notify the SELLER of the visit of the Supplier's or Manufacturer's representative at least 48 hours in advance of arrival at the work site.
- B. BUYER'S Report: The BUYER shall deliver to the SELLER a written report prepared by the Supplier's or Manufacturer's representative, addressed to the SELLER, certifying that the equipment has been properly installed and lubricated, is in accurate alignment, is free from any undue stress imposed by connecting piping or anchor bolts, and has been operated satisfactorily under full-load conditions. The Supplier's or Manufacturer's representative shall also provide written authorization that the equipment can be operated. This report shall be submitted within 7 days of the Supplier's or Manufacturer's representative visit to the site.
- C. Scheduling Tests: The BUYER shall be responsible for scheduling all field testing. The BUYER is advised that the SELLER and the SELLER's operating personnel will witness field testing and that the Supplier's or Manufacturer's representative shall be required to instruct the SELLER's operating personnel in the correct operation and

maintenance procedures. Such instruction shall be scheduled at a time arranged with the SELLER at least 2 weeks in advance, and shall be provided while the equipment is fully operational. On-site instruction shall be given by qualified persons who have been made familiar in advance with the equipment and systems in the plant. Thirty (30) days prior to scheduling any field testing, the BUYER shall have previously received approval of the SELLER'S Manuals required under Section 01300. No field testing will be permitted if this requirement is not met. Any associated delays to the completion of the contract resulting from delayed testing due to incomplete or unapproved SELLER'S manuals will be the responsibility of the BUYER.

- D. **Test Support:** The BUYER shall furnish all personnel, power, water, chemicals, fuel, oil, grease, and all other necessary equipment, facilities, temporary and interim connections, and services required for conducting the tests and shall properly dispose of all material, media, and lubricants upon completion of the test.
- F. Notice Requirement: Field testing shall be in addition to, and not in lieu of, shop testing. Field testing will be performed as a part of the overall physical and functional testing process defined herein and in accordance with the approved Checkout Plan. However, as a minimum the following specific instructions shall also apply. The BUYER shall provide 7(seven) calendar days written notice indicating the date and time for testing each piece of equipment, or a series of equipment pieces.
 - 1. All equipment installed by the BUYER shall undergo an operational check by the BUYER to verify that the equipment is functioning (electrically, mechanically and structurally) as it has been installed.
 - 2. Each device shall be operated through its full range of motion and each instrument shall be checked against its full span.
 - 3. At a minimum, this check shall include turning the equipment on and running it through one full cycle. This cycle shall include all operating possibilities. Signals or interlocks from other pieces of equipment may be simulated upon prior approval of the SELLER.
- G. Review of Procedures: Field test procedures will be reviewed and returned by the SELLER within 7 (seven) days of receipt. Incorporate minor comments to the procedures, equipment, or personnel prior to testing. Major comments by the SELLER will require a resubmission of the field test procedure and proposed test date. The BUYER will be notified, in writing, by the SELLER if a formal resubmission is required with the transmittal of the review comments.
- H. Additional Notice Requirements: Provide 7 (seven) day's written notice to the SELLER prior to the actual start of any testing. This will include a statement by the BUYER that the equipment and facilities to be tested have been thoroughly inspected and cleaned of construction debris or other extraneous materials and all lubrication, materials, and preparations are completed.

- I. **Test Report Requirements:** At conclusion of the test the BUYER will deliver draft test report data, and then submit, within 7 (seven) days after completion of the tests, 6 (six) copies of the following to the SELLER for approval:
 - 1. Completed test forms, for each device tested, on forms provided by the BUYER prior to the tests.
 - 2. Completed certification documentation, the content of which was approved prior to the tests.
 - 3. A written summary of the test; a report of the results and a summary of the entire procedure.
 - 4. A schedule for retesting, if necessary. Perform any retesting required to fulfill the intent of the technical specification test requirements at no additional cost to the SELLER.

1.8 FUNCTIONAL TESTING

- A. When listed in Appendix A of this Section, specific functional tests shall be performed by the BUYER who supplied the equipment being tested in addition to the requirement for shop, field, and other tests called for in the Technical Documentation.
- B. The BUYER shall provide 15 days written notice in accordance with Section 1.6, indicating the date and time during which the specified functional test is proposed. Submit with this notice a contract specific functional test plan which follows the generic functional test plan included in the contract, and which includes the following to the SELLER for approval:
 - 1. Description of the system's equipment, piping, valves, instruments and other components, and the applicable specification sections.
 - 2. Test procedures to be provided by Engineer.
 - 3. Testing devices that will be used in the tests: Description must state what portion of the tests that the devices will perform or measure, and device accuracy. Submit sample measurement results and catalog cuts.
 - 4. Personnel used to perform the tests: Submit resumes and qualifications. As a minimum, personnel must have three years experience with the operation of the equipment and/or system to be tested and have participated in five similar tests during this period of experience.

- 5. Schedule for Testing: Schedule shall include frequency of measurements, personnel present, and contingency plans for equipment and/or system test failure.
- 6. Test forms: Provide test forms for recording and reporting on the test data.
- 7. Material and equipment required for the test.
- 8. Utility requirements: Utility requirements will be identified and supplied by the BUYER for functional testing purposes. Provide labor for the reuse of the test water.
- 9. Operational requirements: Include valve positions, set-ups, and gate positions that are required to run the tests in the written request so that the CM can anticipate and plan for the testing. Provide all temporary piping, connections or other temporary requirements related to performance of the functional tests.
- C. The BUYER will be obligated for installation and cost associated and cost associated with all temporary materials and systems required to facilitate functional testing.
- D. The SELLER, and the SELLER will direct specific actions when conflicts surface and will witness the performance of these tests.
- E. Approval of the functional test package by the SELLER will be made within two weeks of the test date. Incorporate minor comments on the procedures, equipment, and personnel prior to testing. Major comments by the SELLER will require a resubmission of the functional test package and test date.
- F. Provide seven (7) days written notice to the SELLER prior to the actual start of any testing. This will include a statement by the BUYER that the equipment and facilities to be tested have been thoroughly inspected and cleaned of construction debris or other extraneous materials and all lubrication, materials, and preparations are completed.
- G. Submit within seven (7) days after completion of the tests, 6 (six) copies of the following to the SELLER for approval:
 - 1. Completed test forms, for each device, or system tested, on forms approved prior to the test.
 - 2. Completed certification, the content of which was approved prior to the tests.
 - 3. A written summary of the test; a report of the results and a summary of the entire procedure.
 - 4. A schedule for retesting, if necessary, including changes to procedures, testing devices, or personnel. Any retesting required to fulfill the intent of the test requirements due to negligence, poor workmanship, or Products that fail to meet the Contract requirements, shall be at no additional cost to the SELLER.
- 1.9 CORRECTIONS TO THE WORK

Correct any items of work failing to meet the specified requirements, at no additional cost to the SELLER. Correct the nonconforming items by re-work, modification, or replacement, at the option of the SELLER. This includes the provision of all required labor, materials, and requirements for retesting as specified herein, to verify that the items conform with Contract Documents.

1.10 SAFETY

Conduct all specified test procedures in compliance with all applicable safety standards and regulations.

1.11 SUPPORT FOR FUNCTIONAL TESTING

If the operation of the BUYER's equipment is necessary to support the testing of other BUYERS' equipment, the SELLER may direct the BUYER, in writing, to provide operations support. A change order will be prepared for the cost of the following items:

- A. Prepare and submit an Operations Plan to the SELLER to provide for the operation and maintenance of their equipment to support the testing of other BUYERS' equipment. The plan will define all operations and maintenance requirements for a period up to and including six months. The SELLER will review and approve the Operations Plan. Details of the Operations Plan shall include the following:
 - 1. Standard Operating Procedures for starting, stopping, and routine operation.
 - 2. Procedures and schedules for the lubrication, calibration, and other items required to properly maintaining equipment.
 - 3. Utility requirements: Utilities to be supplied by the BUYER for operations support purposes.
- B. In the event an Operations Support Plan is approved and accepted by the SELLER, and the BUYER is directed in writing by the SELLER to proceed with implementation, the SELLER will prepare an operations punch list which defines the items and services which are not completed and their value. Retainage will then be reduced to the value of this incomplete WORK.

The one (1) year warranty period will not begin until final start-up and operation.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

** END OF SECTION **

PART-1 - GENERAL

1.1 DESCRIPTION

- A. Contract Closeout is the process that commences as the WORK nears Substantial Completion. It continues through Substantial Completion, and Final Acceptance of the WORK.
- B. This specification section defines the overall changeover process from construction (by the BUYER) to plant operations (by the SELLER). This section defines the terms in this process, and outlines the responsibilities of the BUYER, the SELLER, and the SELLER.

1.2 CONTRACT CLOSEOUT SEQUENCE OF EVENTS

A. The sequence of events and their description listed below represent the suggested order of activities as the Contract proceeds from construction, through checkout, testing, Substantial Completion, and the Notice of Completion. Not all work will proceed in this exact order. Adjustments may be made, after approval by the SELLER, for the mutual benefit of the BUYER and the SELLER, if the situation so warrants. Any adjustment made in the sequence of events, to accommodate the BUYER, shall be at no additional cost to the SELLER.

B. Closeout Sequence of Events and Description

- 1. Checkout Plan The BUYER will prepare a Checkout Plan in accordance with Section 01680. This plan becomes the basis for all checkout, shop, field, and functional testing. It includes schedules, personnel, test media, and equipment requirements, and shall fully define the BUYER's intended checkout process.
- 2. WORK Nears Completion Signifies the start of checkout and testing. The BUYER shall indicate when work is ready for checkout and testing on a facility and/or system basis.
- 3. Contract Closeout Deliverables The BUYER shall provide the following, in accordance with the Checkout Plan and as specified:
 - a. Shop testing in accordance with the technical specifications and Section 01680.
 - b. Field Testing in accordance with the technical specifications and Section 01680.
 - c. Physical Checkout in accordance with the Contract Documents and Section 01680.

- d. Functional Testing in accordance with the technical specifications and Section 01680.
- e. SELLER's Manuals, in accordance with Section 01300.
- f. Vendor Training, in accordance with the technical specifications.
- g. Final Record Drawings, in accordance with Section 01050.
- h. Written guarantees, where required.
- i. Maintenance stock items; spare parts; special tools.
- j. Copy of final sign off of all permits.
- k. Certificates of inspection and acceptance by local governing agencies having jurisdiction.
- 4. Pre-Final Inspection and Discrepancy List The SELLER will conduct a pre-final inspection of the WORK prior to substantial completion. The SELLER will prepare a discrepancy list (punchlist). The discrepancy list includes items of work which do not conform to the Contract Documents, plus any additional items found to be missing, incomplete, damaged, incorrect, or constructed in an unworkmanlike manner. The BUYER shall correct all items on the discrepancy list.
- 5. Operational Demonstration The BUYER shall conduct an eight (8) hour Operational Demonstration of the facility in accordance with Section 01660 of the Specifications.
- 6. Substantial Completion Following correction of items on the discrepancy list, and successful completion of the operational demonstration, the BUYER shall notify the SELLER that the WORK is substantially complete. Refer to the General Conditions for other requirements for Substantial Completion.
- 7. Final Inspection Following written notice from the BUYER that the entire WORK is complete. The SELLER, the CITY, and the BUYER will conduct a final inspection to verify that the WORK is complete. The SELLER will prepare a final punchlist of all outstanding items.
- 8. Notice of Completion The SELLER will file a Notice of Completion with the County Recorder to begin the 30-day stop notice filing period.

1.3 SUBSTANTIAL COMPLETION

A. Substantial Completion is defined in Article 5.12 of the Agreement.

Article I. EXHIBIT D

000828

Project Schedule

See Exhibit C for Project Schedule

Article II. EXHIBIT E

Biogas Metering System, MMBTU Testing and Conversion to Determine Base Price paid for Biogas

MEASUREMENT AND TESTING

Subject to the terms and conditions of this Agreement, Buyer, in accordance with Article 4.2, shall install, operate and maintain facilities, including suitable volumetric meters and equipment for the purpose of measuring the volume of all Biogas delivered by Seller to Buyer.

All volumetric measurements of Biogas shall be corrected from the actual pressures and temperatures to a pressure of fourteen and seventy-three hundredths (14.73) Psia, and a temperature of sixty degrees Fahrenheit (60°F), and shall be computed in accordance with the procedures established by the American Gas Association Gas Measurement Reports, as revised from time to time and subsequently adopted by the Buyer.

Buyer shall calibrate such meters, in accordance with Section 4.2 and Buyer's internal guidelines as to frequency and methods of calibration, and Seller may have its representative present at such calibrations. Seller shall have the right to request a special calibration of any meter at any reasonable time; however, if any such requested special calibration shows that the meter was registering within two percent (2%) accuracy, then the cost of such requested special calibration shall be borne by Seller. In the event any calibration of a meter does not register within two percent (2%) accuracy, the Buyer shall restore the metering equipment to a condition of accuracy in a reasonable time and the quantity of Biogas theretofore delivered and received shall be recalculated and corrected for any period where such inaccuracy was definitely known to exist. If the period of time is not definitely known, then such recalculation shall only be made for a period covering one-half of the elapsed time since the last calibration test.

Seller may install or cause to be installed and operate check meters at its option and expense to check Buyer's meters, but measurement of Biogas for the purpose of this Agreement shall be by Buyer's meters. Such check meters and equipment shall be installed so as not to interfere with the operation of the meters and measuring equipment required by Buyer.

Utilizing a mutually agreed upon independent testing laboratory, Buyer shall take Biogas samples in accordance with Secion 4.3 at or reasonably close to the Point of Receipt and determine the MMBTU content ("Heating Value") of all Biogas delivered to Buyer by means of a gas chromatograph and calculations based on the chromatographic analysis of the Biogas, or such other methods that may be mutually agreed upon by Buyer and Seller. Seller shall have the right to request that additional Biogas sample be taken for re-determination of such Heating Value at any reasonable time; however, if any such requested additional testing shows that the previous test was within two percent (2%) accuracy, then the cost of such requested testing shall be borne by Seller. In the event any such additional testing shows that the previous test was not

within two percent (2%) accuracy, then the cost of such requested testing shall be borne by Buyer and the Heating Value of Biogas therefore delivered and received shall be recalculated and corrected for any period where such inaccuracy was definitely known to exist. If the period of time of such inaccuracy is not definitely known, then such recalculation shall be made for a period covering one-half of the elapsed time since the last test results. The Buyer and Seller shall have the right to witness said independent testing with copies of said independent testing laboratory results to be given to all parties.

Both Buyer and Seller shall have the right to be present at the time of any installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating, or adjusting done in connection with the other's measuring equipment used in measuring deliveries hereunder. The records from such measuring equipment shall remain the property of their owner, but upon request either party shall make available its records and charts, together with calculations there from, for inspection and verification by the other.

EXHIBIT F

RATE ADJUSTMENT CALCULATION

Base Price (The term as used here, for this calculation, as it relates to terms in the BLS Report 807, includes premium, if applicable) US\$ 1.10 per MMBTU and US\$ 0.25 premium if applicable

Index to be used for adjustment

U.S. Department of Labor's Consumer Price Index

for the San Diego Metro Service Area

Initial Adjustment Date

July 1st of Contract Year 6

Base Period Index

Annual average index for the calendar year prior to

the Initial Adjustment Date. (Contract Year

five(5)

Subsequent Adjustment Dates

Annually, on July 1st of each year following the

Initial Adjustment Date

Adjustment Methodology

Divide the Annual Average index for the calendar year prior to the adjustment date by the Base

Period Index, and then multiply by the Base Price.

Additional information

Method to be used follows the Simple Percentage

Method as described by BLS Report 807,

Escalation and Producer Price Indexes: A Guide

for Contracting Parties.